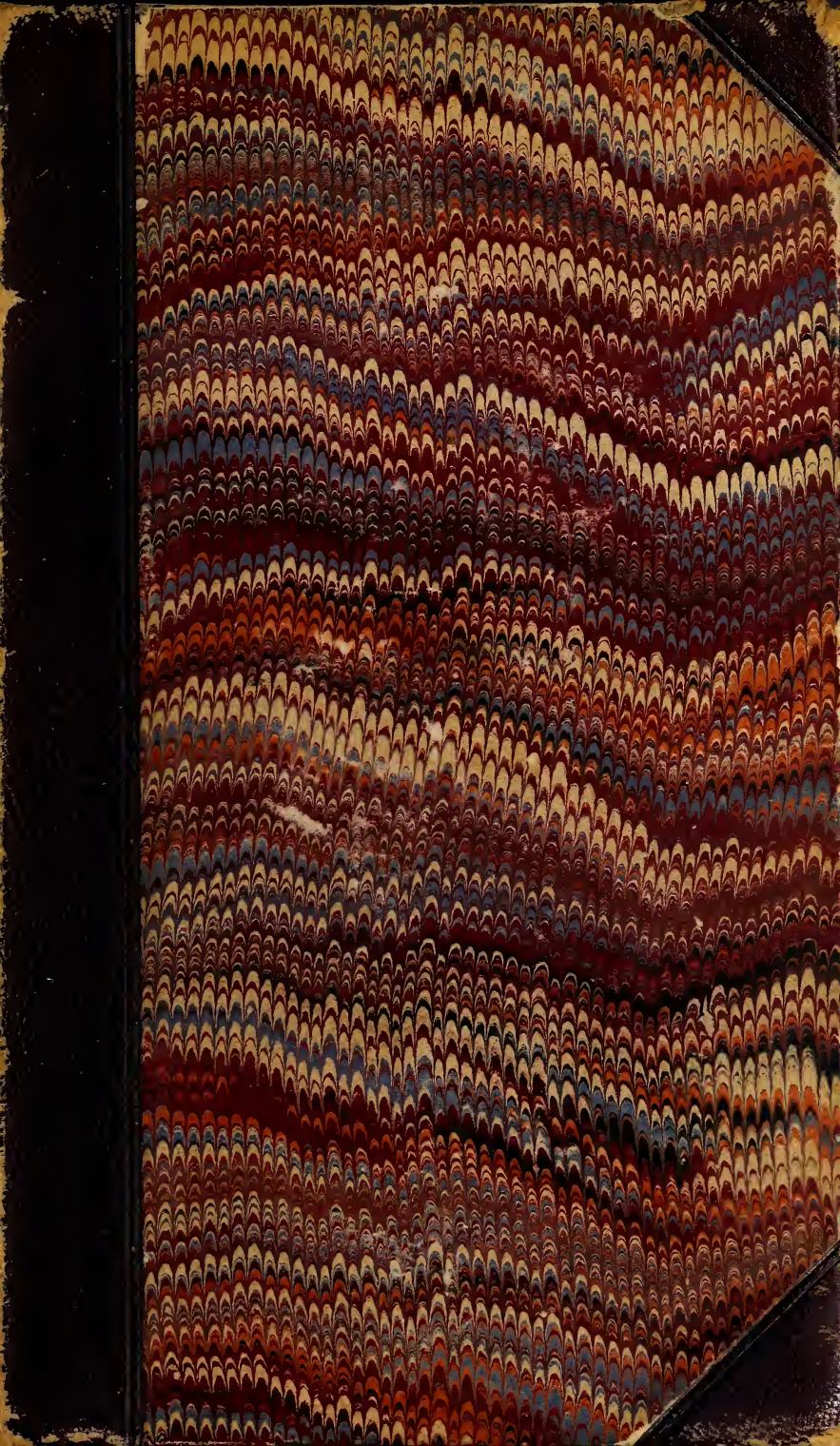




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M A N,

AS KNOWN TO US
THEOLOGICALLY AND GEOLOGICALLY.

LONDON:
GILBERT AND RIVINGTON, PRINTERS,
ST. JOHN'S SQUARE.

MAN,

AS KNOWN TO US

THEOLOGICALLY AND GEOLOGICALLY.

BY THE
REV. EDWARD NARES, D.D.

RECTOR OF BIDDENDEN, KENT;
AND REGIUS PROFESSOR OF MODERN HISTORY IN THE
UNIVERSITY OF OXFORD.

PSALM VIII.

4. What is MAN, that thou art mindful of him: or the son of man, that thou visitest him?

5. Thou madest him lower than the angels: to crown him with glory and worship.

6. Thou makest him to have dominion over the works of thine hands: and thou hast put all things in subjection under his feet;

7. All sheep and oxen: yea, and the beasts of the field;

8. The fowls of the air, and the fishes of the sea: and whatsoever walketh through the paths of the sea.

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1834.

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M A N

AS KNOWN TO US

THEOLOGICALLY AND GEOLOGICALLY.

IF, in the whole compass of the globe, any book should ever be discovered older than the Bible, containing records of greater, or only equal credibility, but ascending far higher than the best computed era of the Mosaic account of the origin of the human race, then I shall be willing to grant, that the foundations of the present work may be shaken, and readers must be left to collect the history of sublunary events from other sources.

It is solely upon the supposition, or perhaps I ought rather to say at once, the most absolute persuasion, that no such discovery will ever now be made, that these remarks are submitted to the consideration and judgment of those who may wish to have such questions as the following resolved for them;—namely, who and what they are? under what circumstances they became inhabitants of this world, what character they are designed and expected to sustain in it, and whither they may be going, or what is to become of them, when their term is out?

All of the above questions have answers provided for them in the Bible; but, to a certainty, no where else.

Fully to answer such inquiries, it is manifestly of no use to explore the *Earth*. The Earth cannot sufficiently tell her own story; if it could, geology, of which we are now in the habit of hearing so much, would in a great measure, cease to be a science, and the curious in such matters would be more in agreement than is yet found to be the case.

The Earth indeed can tell us something about Man, and something of importance, as will be shown in due time. At present it is my intention to defer all consideration of terrestrial phenomena, as bearing upon the history of MAN, till after I shall have shown how indispensably necessary to such beings as ourselves a proper history of Man must be; what an impenetrable cloud of darkness hangs over us without the help of such a history; and how certain it is, that such a history is in existence, let what will become of the Earth as an object of scientific research and inquiry.

Instead of *pressing* science into the service of Revelation, as some have been accused of doing, I am willing to leave science to take its course, if I may but be allowed to insist upon the very superior light of Revelation; not however in any manner disdaining the help of science, where it can be fairly shown to answer my purposes.

As a reason for engaging in such a subject at this time—a subject I fancied I had taken leave of long ago—I shall have to show in the course of my remarks, that if not here, yet certainly in other parts of the world, the examination of the Earth, *has been known* to interfere so far with Revelation, as to persuade both Jews and Christians, that *history is no part of religion*. I hope I shall be able, on the contrary, to

prove, that without the aid of history, there can be no true religion : and when I have said as much as I wish to say of the history of *Man*, it will be time enough to turn to the history of the *Earth*.

I shall not stop then to inquire *here* into the exact physical character of this abode of MAN. It seems to me to be much more than a happy conjecture, that it is a globular body, of certain dimensions, having no solid or visible support, but keeping its destined place in the universe, by the force and influence of original impulses and principles, wholly inscrutable, except in their effects, and dependent on some first intelligent Cause, infinitely more necessary to its being, existence, and arrangement, than the fabricator of an artificial globe, sphere or orrery, to the ingenious and scientific productions of his own hands. A comparison I am the more induced to adopt, because it has been already so effectually made use of to expose the extreme absurdity of *Atheism*, as to stand in the place of a thousand metaphysical arguments.

It is related of that eccentric, but very learned man, Athanasius Kircher, that being acquainted with one who denied the existence of a supreme Being, he took the following method to convince him of his error upon his own principles. Expecting him upon a visit, he procured a costly and ingeniously constructed globe of the starry heavens to be so placed in his room, as naturally to attract the notice of his visitor, who no sooner saw it than he began eagerly to inquire whence it came, and to whom it belonged?—"Not to me," said Kircher, "nor was it ever made by any body, but came into the place where you see it quite by chance." "That" replied his sceptical friend, "is quite impossible ; you are jesting." "Why

do you think so?" said Kircher; "how is it that you will not believe that this small body originated in mere chance, when you would contend, that those heavenly bodies above us, of which it is only a very faint and diminutive resemblance, came into existence without order or design?"

Very long before the time of Kircher, indeed, a similar appeal had been made to the sphere of *Archimedes*; not to confute or convince Atheists, but to correct some overforward Theists, who observing the orderly and regular manner in which the heavenly bodies kept their courses, were for enduing them with intelligence, and making gods of them. Lactantius (for he is the author I refer to) very wisely argued with them, that if Archimedes' sphere, in which these bodies and their movements, were so admirably imitated, was received as a proof of the great skill and contrivance of a known artificer, the heavenly bodies themselves could only deserve to be regarded as the workmanship of one as much transcending Archimedes in intelligence and power, as the stars in the firmament surpassed his artificial imitation of them; while the undeviating regularity of their motions, which excited so much wonder, as plainly showed that so far from being gods, they were not moved by any *will* or *intelligence* of their *own*, but were only operating in strict obedience to certain laws imposed on them by an extrinsic cause, equal to *effects*, infinitely surpassing the present comprehension of man.

So simple is the refutation of Atheism upon the principles of common sense—so irresistible the inferences to be drawn from a mere inspection and consideration of the products of human art, especially

when applied to the purposes of science. In such cases, who was ever known to doubt for one moment of the existence of an intelligent artificer, as indispensably necessary to the production of the several objects?

It has been questioned, whether a truly systematic Atheist ever did, or ever will exist. There are, however, so many reasons why men of loose principles, profligate and idle habits, or even careless lives, should wish rather to live without God in the world, than to fix upon themselves all the responsibilities of accountable beings, during their short sojournment upon the earth, that it need never excite much wonder in our minds, to hear occasionally the most palpable truths disavowed and denied, if they stand in the way of persons *reputed* to be *accountable*; but to *deny*, and to *disprove* truths, evident to others, are totally different things: we may be very certain, therefore, that if any really systematic Atheist should at any time exist, his infirmity would not be found to be very contagious. There never could be *many* in the world capable of being imposed upon by Kircher's insidious negations, that his artificial sphere had been made by nobody, and had come into the corner of his chamber quite by chance; and till this is the case, we may be assured that *Atheism*, in the strictest sense of the expression, can have no chance of becoming general, though there may be always some, and probably far too many of that description of persons, loose in the world, disposed, like "the fool" in the Psalms, to "say in their *hearts*," without the trouble of consulting their heads, "that there is NO GOD!" Admirably has the learned Chillingworth expressed himself upon this very text. "The words," says he, "do not run thus, the fool being convinced by the

evidence of reason and demonstration hath concluded there is no God: no, this is no heathenish philosophical fool; he is quite of another temper: this is a worldly, proud, malicious, projecting, wise fool; a fool who knows it is for his advantage to put God out of his thoughts; and, therefore, doth forcibly captivate, and wilfully hoodwink his understanding, and thinks he hath obtained a great victory, if he can contrive any course to bring himself to that pass, that no cold melancholy thoughts of God or hell, may interrupt and restrain him from freely wallowing in the lusts and uncleanness of his heart, without remorse; it is for his *heart's* sake, the love that he bears to the lust thereof, that makes *him* an Atheist."

"I speak," said St. Paul to the Greeks at Corinth, "as unto wise men, judge ye what I say." This was a delicate way of securing their attention by a compliment; for the Greeks at Corinth "were all wise in their own conceit," and much "puffed up," to use the apostle's own expression, on that account. He does not therefore go out of his way, to disparage their understandings without necessity, but appeals to their own judgment as to the case in hand, as though they were really already sufficiently wise for his purposes; but after all, we shall find him relying more on the decision of their *hearts* than of their *heads*, as in the case of his own countrymen, the Hebrews, whom he especially cautions against "an evil *heart* of *unbelief*;" that is, an infidelity proceeding rather from a vicious or faulty disposition of mind and affections, than from the head or understanding.

Those who may be disposed to think that the credulity of believers is an unreasonable bias, would do well to consider that *incredulity* is quite as likely

to proceed from a bias; for certainly, every vicious inclination which a man is resolved to pursue, is a strong bias upon his mind towards infidelity, or at least towards such false or corrupt notions of God and religion, as insensibly lead men to it.

Infidelity besides may often arise from pride and self-conceit, which disposes men of *parts* and *learning* to an affectation of singularity, and a desire of seeming wiser than other people, by maintaining paradoxes, and contradicting all opinions that are vulgarly received, for that very reason, because they *are* so¹. At all events, what men do not like, they are very unwilling to understand, and still more backward to believe.

If the above several causes do not lead to an absolute incorrigible pitch of infidelity, they may yet reduce a man to that melancholy state of *unconcern* about the very being of God, and a *future* state, which cannot be better described than as it has been rightly enough called, a most dangerous, if not altogether an *atheistical indifference*.

Now as this is a state, into which many may fall inadvertently, not through any want of education, understanding, or even learning, (to speak generally), but merely for want of having certain particular truths, so brought home to their minds, as to be secure against any subsequent disturbance, (of which there is always more or less danger,) I propose to show, that even the best educated persons, those endowed with the highest gifts of understanding, nay, even the most

¹ " Illis quieta movere magna merces videbatur."—*Sallust*.

" They thought the very disturbance of things established, sufficient hire to set them to work."—*Hooker*.

learned, to a certain extent, may yet be labouring under a most fatal ignorance, if any untoward circumstances should have led them to *neglect*, much more to *despise*, the history of the EARTH and of MAN, contained in the Bible.

For though, the great advancement of knowledge and science, must in one point of view have appeared to lessen our importance, by reducing our history to that of only one small planet, of one circumscribed system, out of myriads and myriads perhaps of other systems and other planets, yet it should be considered, that after all, the Bible history is undeniably the only history that connects us with the universe at large, and what is more, with the ineffably great, omniscient, and omnipotent Author of the Universe itself: it is the only history that can help us to clear up certain difficulties attending our situation here, and which without some such help, must remain inexplicable, most mortifying, and melancholy *mysteries*; Man himself perhaps the greatest, as has been well, and not extravagantly shown both in poetry and prose.

“ How poor, how rich, how abject, how august,
 How complicate, how wonderful, is MAN !
 How passing wonder HE who made him such !
 Who center'd in our make such strange extremes,
 From diff'rent natures marvellously mix'd,
 Connection exquisite of distant worlds !
 Distinguished link in being's endless chain !
 Midway from nothing to the Deity !
 A beam ethereal, sully'd and absorpt ;
 Though sully'd and dishonour'd, still divine ;
 Dim miniature of greatness absolute !
 An heir of glory ! a frail child of dust !
 Helpless immortal ! insect infinite !
 A worm ! — a god ! — I tremble at myself,
 And in myself am lost — at home a stranger,

Thought wanders up and down, surpris'd, aghast,
 And wond'ring at her own—how reason reels!
 O what a miracle to man, is man!
 Triumphantly distress'd — what joy! what dread!
 Alternately transported and alarm'd!
 What can preserve my life? or what destroy?
 An angel's arm can't snatch me from the grave;
 Legions of angels can't confine me there."

Is this mere rant, or is it sober truth? To prove it to be the latter, I shall produce a specimen of the *same thoughts*, from the pen of a writer, whose gravity and sobriety never can be disputed, and whose superior powers of reasoning, have long been acknowledged throughout the whole civilised world. I speak of the celebrated *Blaise Pascal*,¹ from whose excellent but loosely arranged "Thoughts," I propose to make some extracts, in order to show the folly of that "atheistical indifference," of which I have before spoken.

Thus then does this very eminent and good Christian express his own opinion of the wonderful contrarieties to be found in MAN.

"What a chimera then is man! what a surprising novelty! what a confused chaos! what a subject of contradiction! a professed judge of all things, and yet a feeble worm of the earth! the great depository and guardian of truth, and yet a mere huddle of uncertainty; the glory and the scandal of the universe! If he is too aspiring and lofty, we can lower and humble him: if too mean and little, we can raise and swell him; to conclude, we can bait him with repugnancies and contradictions, till at length he ap-

¹ Dans aucun temps il n'a existé de plus grand génie. *Bossu*, Dictionn. Historique, Art. *Pascal*.

prehends himself to be a monster even beyond apprehension¹."

But all this is to be understood, as descriptive of man, *without the light of revelation*, which it is necessary to mention, because I have seen a passage of the same writer very similar to this, referred to, in proof of man's positive and *irremediable* weakness and misery, very different from the meaning of the author².

The passage to which I allude, is so much to my purpose, that I shall copy it, exactly as it is cited by the Marquis d'Argens, it being a passage well rendered in the old English version: "When I consider the blindness and misery of man, and those amazing contrarieties which discover themselves in his nature; when I observe the whole creation to be silent, and man to be without comfort, abandoned to himself, and as it were strayed into this corner of the universe, neither apprehending by whose means he came hither, nor what is the end of his coming, nor what will befall him at his departure hence, I am struck with the same horror as a person who has been carried in his sleep into a desolate and frightful island, and who awakes without knowing where he is, or by what way he may get out and escape, and upon this view I am at a loss to conceive how so miserable an estate can

¹ I take this from an English edition of the "Pensées," published in 1704, but as the French is a language seldom admitting of a translation at all adequate to the original, I subjoin what follows: "Quelle chimere est-ce donc que l'homme? quelle nouveauté, quel chaos! quel sujet de contradiction! juge de toutes choses, imbécile ver de terre, dépositaire du vray, amas d'incertitude; gloire et rebut de l'univers: s'il se vante, je l'abaisse; s'il s'abaisse, je le vante, et le contrédis, toujours jusqu'à ce qu'il comprenne qu'il est un monstre incompréhensible."—Sect. xxi. p. 114.

² Lettres Cabalistiques—par le Marquis d'Argens.—Lett. lxxxii.

produce anything but despair." Such a passage, cited in the above *detached* manner, in a work, where, as it has been well observed, "*La religion est peu respectée*¹," but in which there is certainly much display of learning, and curious research, not to say of very sly and insidious wit, must have been intended to make an impression far different from what was meant by the admirable author, whose real design was expressly to show, that blind, and miserable, and incomprehensible as man is by *nature*, he has *not* been left without comfort, he has *not* been wholly abandoned to himself; he has *not* been left unnoticed in a remote corner of the universe, without the *means* of apprehending how he came hither, or what is the end of his coming, or what will befall him at his departure hence. The passage in itself is in fact admirable, as a stimulant to man to look out for that help and information which is to be had, if instead of sinking into despair, he be but wise enough to seek for it, *where it may be found*. Let him dream as much as he will, that he has been carried in his sleep into a desolate and frightful island; let him only allow himself to be awakened by such a Christian as *Pascal*, and he will soon know not only where he is, but by what way he may get out and escape.

But *Pascal* shall speak for himself; I shall continue the passage which his sly countryman has curtailed for other purposes.

"I behold other persons near me of the same nature and constitution; I ask if they are any better informed than myself, and they assure me they are not; immediately after which I take notice that these

¹ Dictionnaire Historique, Art. *Argens*.

unfortunate wanderers having looked about them, and espied certain objects of pleasure, are contented to seek no farther, but swallow the bait, embrace the charm, and fasten themselves down to the enjoyment. For my own part, I can obtain no satisfaction or repose in the society of persons no better than myself, labouring under the same weakness and the same distress—I find they will be able to give me no assistance at my death: I shall be obliged to die alone; and, therefore, I ought to proceed in this respect, as if I lived alone. Now, in a condition of solitude, I would entertain no projects of building: I would perplex myself with none of the tumultuary affairs of life: I would court the esteem of no person; but would devote myself and my pains to the discovery of truth.

“Hence, reflecting how probable it seems that there may be something else besides that which now presents itself to my eye, I begin to examine, whether that Supreme and Divine Being, which is so much talked of by all the world, has been pleased to leave any marks or footsteps of himself. I look round on all sides, and see nothing throughout but universal obscurity. Nature offers no consideration but what is the subject of doubt and disquiet. Could I nowhere discern the least token of divinity, I would resolve not to believe at all; could I in every thing trace the image of a Creator, I would rest myself upon a sure and settled belief; but, while I see too much to deny, and too little to give me any certain confidence, my condition renders me an object of pity; and I have a thousand times wished that if nature have indeed a Divine Author and Supporter, she would present us with the lively draught and uncontested character of his being; but, that if the marks she does bear about her

are fallacious, she would entirely conceal him from our view ; that she would either say all, or say nothing, so as to determine my judgment one way or the other. Whereas, under my present suspense, being ignorant as well of what I am, as of that which is expected of me, I remain an equal stranger to my condition and my duty. In the meantime my heart is absolutely bent on the search of real and solid good, such as, when found, may complete my hopes and regulate my conduct. I should think no price too dear for this acquisition !

“ I discover a multitude of religions in all countries and times ; but they are such as neither please me with their morals, nor move me with their proofs. Thus I would at once reject the religion of Mahomet, of China, of the Egyptians, and of the ancient Romans.

“ But while I am making my reflections on this strange and unaccountable variety of manners and belief in different countries and periods, I find in one little corner of the world a peculiar people separated from all the nations under heaven, whose registers exceed, by many ages, the most ancient stories now on record. I discover a great and numerous race, who worship ONE GOD, and are governed by a law which they affirm themselves to have received from his hand. The sum of what they maintain is this : that they are the only persons whom God has honoured with the communication of his mysteries ; that all other men having corrupted themselves, and merited the divine displeasure, are abandoned to their own sense and imagination ; whence arise the endless wanderings and continual altercations amongst them, whether in religion or civil discipline, while their nation alone has

preserved an immovable establishment. But that God will not for ever leave the rest of the world under so miserable darkness; that a common SAVIOUR shall at length arrive; that the sole end of their polity is to prefigure and proclaim his arrival; that they were formed and constituted with express design to be the heralds of his great appearance, and to give warning to all nations that they should unite in the blessed expectation of a Redeemer!

“My adventure amongst this people, as it gives me the greatest surprise, so it seems to me to deserve the highest regard and attention, on account of the many wonderful and singular curiosities discoverable in their frame.

“They are the most ancient people that fall under our knowledge and discovery; a circumstance, which in my judgment, ought to procure them a very particular veneration, especially in regard to our present inquiry; because, if God has at any time vouchsafed to reveal himself to mankind, these are the persons from whose hands we are to receive the tradition!

“Nor are they only considerable in point of antiquity, but no less singular in their duration, from their original to this day; for while the several people of *Greece*, of *Italy*, of *Sparta*, of *Athens*, and of *Rome*, together with others that sprung up long after them, have been extinct many ages, these have always subsisted—and stretching themselves from the earliest to the latest memory, have caused the annals of their own nation to be co-extended with the history of the world.

“The same people are still no less to be admired for their great sincerity. They preserve with the utmost faithfulness and zeal the very book in which

Moses has left it recorded, that they were ever stubborn and ungrateful towards God, and that he foresaw they would be more perverse after his death; that he therefore calls heaven and earth to witness against them, as to the sufficiency of the warning which he had given them; that finally, God being incensed by their transgressions, should scatter them through all lands."

Much more does this great man say of the Jews, as will be seen elsewhere; at present I shall select a passage from another portion of his book, to the following effect:—"Man," says he, "is visibly made for thinking; this is all the merit which he boasts, and all the glory to which he aspires. To think as we *ought* is the sum of human duty; and the true art of thinking is to begin with ourselves, our Author, and our end."

Of *ourselves*, it must be admitted, we can form no adequate judgment or opinion, but from a proper history of the species. Of our *Author*, we can know nothing *certain*, but from what he may have been pleased to reveal; nor of our *end*, but through him on whom the end as much as the beginning depends.

Now, *the history* to which Pascal alludes in the passages above, expressly includes all these things. The history of MAN, of his MAKER, and of his future prospects. And the great point to be ascertained is—Can it be true? or, to put the same question in another and perhaps a more determinate form, I shall venture to suggest the following very simple, though important alteration, namely—Can it be *false*?

The first answer I shall return to this question, will be to copy some remarks of my own, printed and published long ago, but for a work of such cost and mag-

nitude, as to be little likely to pass into many hands. It is part of my preface to a new edition of Macklin's Bible, published in the year 1824, and dedicated by permission to his late Majesty. One thing I shall wish to premise, namely, that there may be expressions in it, apparently not very suitable to the conclusions of *geologists*; my explanation of such seeming discordancies shall be found elsewhere. Geology is certainly become a very fashionable study, nor do I desire to check its course; I merely wish to interpose a few *cautions*, for the behoof and security of those who have not lived yet so long as myself. "True fortitude of understanding," says Paley, "consists in not suffering what we know, to be disturbed by what we do *not* know." Having made these few preliminary observations, I shall proceed to the extract I wish to introduce.

"It would be well if every reader, before he enters upon the perusal, or rather study, of the BIBLE, be his principles what they may, would endeavour to form in his mind as comprehensive and correct ideas as possible of its *history* and *character*, independently of the particular nature and purport of its contents. For since it is impossible to undo what has undoubtedly taken place, however it may be slighted by some, or even disbelieved by others, its *history* and *character* cannot now be changed. It must have been extant and known to the world for some certain period of time. The testimony borne by those who have gone before us to its *divine* origin and authenticity, cannot be annihilated: hundreds of thousands in various parts of the earth, are known to have well weighed its contents, studied and meditated upon it in all its parts, examined into the evidences of its age and genuine-

ness, complied with its laws, obeyed its precepts, and died in the faith of all it announces, of all its promises, and all its threats.

“Even the *atheist* then, who would pretend to deny the very being of God, cannot possibly obliterate the indelible traces to be discovered in the Bible, of his existence, his power, his wisdom, and his providence. The *deist*, who denies not his existence and providence, but disputes the fact of his interposition in the way of revelation or manifestation, cannot annihilate those records in which such revelations and manifestations are related and preserved; he cannot do away those evidences of miraculous interposition, to be deduced from the fulfilment of prophecy, in which both the prediction and event conspire to prove, that nothing less than prescience and design, supported by a power absolutely irresistible, could possibly have brought them to concur.

“The *Jew*, who receives and acknowledges one portion only of the sacred volume, and rejects the other, cannot hinder the effects of such proofs and evidences of their connection as the NEW Testament in particular supplies; he cannot deny to any the liberty of making the comparison and reference which the New Testament claims and challenges, or of applying the one part of the Bible to the illustration of the other. Objections of this nature then can never be said to affect the character of this wonderful book. Then only will its character be changed, when it is *universally* acknowledged to be incapable of affording conviction of its own supernatural origin; a circumstance which we shall endeavour to show, is every day becoming less and less likely to occur.

“The Old and New Testament continue to be the

‘Two Witnesses,’ whose testimony we are bound to examine and meditate upon, if we would act like persons who have but so much common sense as to discern, that we are by nature dependent beings, who brought nothing into this world, and, it is most certain, can carry nothing out; but whose existence may undoubtedly be continued or renewed in another state as surely and as easily as it has had its commencement here. Had not such revelations been ever heard of as the Jewish and Christian religions, the same sense of our dependence, should in reason incline us, to examine *any* records or traditions of similar *pretensions*. There is no form or institute of religion, in civilized or barbarous countries, that claims to be founded on divine revelation, which would not merit our attention and consideration, *if we knew no other*, merely on the ground of such claims. Man, in his natural state of darkness and dependence, is bound to notice and inquire into any pretensions of this description; for the hopes of the wild African may be said to be better than no hopes at all.

“It is however, most certain, that in the present state of things, the Jewish and Christian revelations have a claim to be examined *prior* to all others whatsoever, inasmuch as they not only profess to be derived from heaven, but to be singular and peculiar, to the positive and avowed *exclusion* of all *other* assumptions of the same kind. If the proofs and pretensions of the Jewish and Christian revelations be such as are not to be resisted or controverted, we need search no further¹. Through these we may be perfectly as-

¹ “Christianity is the only religion that ever pretended that there should come a time when it should be the religion of the world in general.” President Edwards.

sured, that we shall not only be put in possession of truth, but of the sole truth of matters ; the only object concerning which we need be solicitous will be attained. The whole duty of man, as well as the will and nature of God, as far as it is discoverable to beings of such finite faculties, will be here disclosed and made known, and here alone. Our own nature, origin, condition, and destiny, as well as the being and attributes of God ; the whole compass of our duties, prospects, hopes, and expectations, and of God's gracious purposes towards us : in short, the things of heaven, and things of earth, will, in these two revelations, be rendered intelligible, just as far as our limited faculties will admit, or our *present state and circumstances require*.

“ It is of great consequence also to consider, that of the two parts of which the Bible may be said to consist, one is undoubtedly less ancient than the other. The less ancient, however, refers us continually to the former, as that with which it is immediately connected ; on which it is as it were founded and built. JESUS, the subject of all the books in the *New Testament*, declared to his disciples, that *Moses* and the Jewish prophets wrote of him, and bade them therefore search those *Scriptures*, (the only ones then extant) to see if he spake true. If this connection then cannot be traced, much of the authority of the *New Testament* will of course fail ; but since it has been concluded to be completely and entirely confirmed, by those who have duly considered the matter, and Christianity has, in consequence of this, prevailed, since its first annunciation, over a very large portion of the globe, and particularly in the parts of it most civilized and enlightened, it is very reasonable now, in taking that

comprehensive view of revelation which concerns us, as rational and responsible beings, to *begin* with Christianity. That is, we may very properly commence the study of the SACRED VOLUME, upon *Christian principles*, in order the better to ascertain in our perusal of it, whether the two parts do not in every particular tend to illustrate and confirm each other.

“ The Scriptures of the New Testament speak of a *first* and second ADAM. The one sent into the world to rectify and repair, what would else, through the fall and transgression of the other, have infallibly operated to the total loss and ruin of mankind : but the second Adam is very much nearer to our own times than the first. We may be expected, therefore, to have greater opportunities of ascertaining the facts related of the second Adam than of the first : especially, as the times in which the second appeared, were much more favourable to the due authentication of such facts, as far as human testimony can reach, than we can conceive to have been the case, at the period in which the first Adam had his abode upon earth. It is upon such grounds as these then, that we conceive it to be reasonable to make Christianity the ground-work of our researches ; because, if we believe the New Testament to the extent the authors of its several parts require, we must proceed to the study of the Old Testament as of a book undoubtedly inspired and dictated by God ; for as such the writers of the New Testament regard it, and refer to it. They evidently speak of the first Adam as the head and representative of the whole human race ; and this, expressly as he is described to be in the writings of *Moses*. The writers of the New Testament, therefore, who all lived and wrote less than nineteen centuries ago, undoubtedly

gave credit to the account of Moses, as contained in the Book of Genesis, and which conveys to us the history of the creation of the earth and of man; that event reaching back to an extent of nearly six thousand years from the present time at the *lowest* computation, and to a period of four thousand years *at the least*, preceding the existence of the writers themselves.

“Seventeen or eighteen hundred years ago, therefore, we may be sure that certain writers, many of whom laid down their lives in testimony of the facts they related, and the doctrines they promulgated, fully and entirely believed the *Mosaic* account of things to be true; that Adam was the first of the human race, as Moses has described. Whatever records or monuments of *remoter* ages may be supposed to have perished in the course of time, of this we must be certain, that seventeen or eighteen hundred years ago, many more of *such* records must have been extant than is the case at present, and that it must have been proportionably the more difficult to impose upon mankind any false era for the commencement of things, but especially so *low* a one as that assigned by the sacred writers.”

It is the *low* era fixed upon for the *commencement* of all *human concerns* on which I shall have principally to insist; and I consider it to be of more importance at the present time than ever it was before, because the history of our race is so interwoven with what is commonly called the *Mosaic creation*, contained in the first two chapters of Genesis, as well as with the catastrophe of the Deluge (chapters vii. and viii.), that any conclusions drawn with regard to terrestrial phenomena, *apparently* contrary to, or incon-

sistent with, those records which have been so long accounted sacred, cannot fail to startle and alarm the minds of zealous and sincere believers, as bearing hard upon the very foundations of Christianity. For as in Christ those only are to be made alive, who died in *Adam*, it is natural to ask, what will become of this sublime doctrine, if the Mosaic account of Adam be not strictly true?

It cannot be doubted but that in the first two chapters of the Book of Genesis, the creation of the *earth* and of *man* appear to be represented as so nearly coincident, that any discoveries indicative of a very great disparity in this respect; any researches into the interior of the globe, that may seem to lead to a conviction, that the one is very much older than the other, must seem to shake the general credibility of the whole; and yet, it is now become quite notorious that certain geologists of great name and reputation, and not hastily to be numbered among unbelievers, think they have discovered in the body of the earth, undeniable proofs, not of any trifling difference or disparity, but of a succession of physical operations extending backwards (to use their own expression) through “countless ages,” and still proceeding in such a series of decay and renovation, as to be in the way of producing continents after continents, and seas after seas, without any assignable check or termination—surely this is enough to excite a strong desire in the breasts of all *unphilosophical* believers, *to be informed*, how far this may reasonably be judged to affect the general credibility of the author of the Pentateuch? For my own part, I very much hope it *may* excite such a desire, as it seems to afford us an excellent opportunity of bringing the veracity and credibility of

Moses, to *another*, and, perhaps, a much surer test : I mean the test, *not* of *physics*, but of uncontradicted *history*.—*Physics* was the test, that arch infidel *Voltaire* would have adopted to the exclusion of all others ; and there is no doubt but that he thought Christianity could no more stand *his* test than Mahometanism, to which he refers. In another part of my work (if it please God that I should live to finish it), I shall have further occasion for showing, how careful we ought to be, not to allow ourselves to be induced to abandon *History*, as an essential part of *Religion*.

I shall willingly then for the present pass over what is said about the *earth* in the beginning of *Genesis*, and keep to the history of *man* ; endeavouring to establish the truth of all that is written about the *first* Adam, by a reference to what we know concerning the *second* Adam. This will be to bring things nearer to our own time, and we may discuss the point with geologists afterwards.

I am sorry I cannot pursue my argument without some appearance of pedantry, in being obliged to refer to authors comparatively very ancient, whose writings never can have been very generally read, and are now every day less likely to be read at all, owing to the multiplicity of more attractive works daily issuing from the press, in all parts of Europe, and in the current languages of the day ; but, as a very learned living prelate has observed, “The present age does not so much require to be set free from error, as to be *reminded* of the truth¹.” And the truth is to be sought for in things past, and in ancient writings, as reasonably, and perhaps very much more

¹ Records of Creation.

so, than in modern books or in objects immediately before our eyes. I shall endeavour, however, to bring forward the evidences I have to produce, with as little parade and formality as possible.

In regard to the Scriptures, *one chapter only* in the Bible, is likely to answer all my purposes, a chapter especially noticed by the compilers of our admirable Liturgy, in being made a part of the solemn service appointed for the burial of the dead. I speak of the fifteenth chapter of St. Paul's first Epistle to the Corinthians, a portion of Scripture eminently calculated to show, how closely all the higher doctrines of Christianity, all "the mysteries of the kingdom of heaven," (Matt. xiii. 11; Luke viii. 10) are interwoven and connected with the only authentic history of *man*. For there it is we find that very remarkable passage, already in some degree alluded to, "For since by MAN came death, by MAN came also the resurrection of the dead; for as in ADAM all die, even so in CHRIST shall all be made alive."

Let us first consider what is intimated in the leading member of this very striking passage.

It is exceedingly plain, that St. Paul, in these words, had some special reason for showing that as by *one* man (or "one man's disobedience," as he soon after wrote to the Romans, chap. v. 19), "sin entered into the world, and death by sin," the "resurrection of the dead," was accomplished and made manifest by Jesus Christ, in the *very same nature*; but had not our Saviour partaken of the Divine nature also, there could not possibly have been any necessity for such a remark; that is, I mean, to speak of his *manhood* or humanity in terms so pointed and emphatical.

If it could have been expiated, if it had been at all reasonable to suppose, that our Saviour being *man*, in no other sense or respect, than HE who “brought death into the world,” could have so overcome death, as to procure for all men a resurrection from the grave, it would have been sufficient to have stated the case simply, and not have sought so carefully to press upon his converts, the additional circumstance, that he who wrought this great redemption for us, was a MAN, *επειδη*, “since,” or *because*, he who brought death into the world was a *man*. The proper, natural inference, surely, to be drawn from the mode in which this matter is propounded in the words referred to is, that there was some very particular reason why HE, who was to *overcome death*, and so open to us the gates of everlasting life, should do it in the *same nature*, which had previously been *overcome by death*, and *sin*, the cause of death.

This fallen nature he was to redeem and restore—it had incurred the penalty of death and that penalty once paid by a mere child of *mortality*, must necessarily have extinguished all hope of an hereafter, with which the penalty itself, in its original rigour, was altogether incompatible.

There must, then, have been something in the *manhood* of Jesus Christ, peculiar to itself; and what could this be, but that it was, as the Scriptures plainly intimate, an *assumed* manhood; assumed, purposely to accomplish the great end of man’s redemption.

I have said, that the Scriptures plainly intimate, that it was an *assumed* manhood; and surely a stronger proof could not be produced, than the following passage in the Epistle to the Hebrews. “Forasmuch then” (*επει ουν*, which is exactly equivalent to *επειδη*)

in the passage before), “Forasmuch then as,” or because, “the children are partakers of flesh and blood, he also himself *likewise* took part of the same, that through death, he might destroy *him* that had the power of death, that is, the devil,”—“for verily, he *took not on him* the nature of angels, but he *took on him* the seed of Abraham. Wherefore in all things it behoved him to be *made like* unto his *brethren*, that he might be a merciful and faithful High Priest, in things pertaining to God, to make reconciliation for the sins of the people.”

Surely in the above passage alone, (numberless others might be cited) we have the reason why the *manhood* of our Saviour is often spoken of *emphatically*. Not as those who call themselves *Unitarians*, with an *undeserved insinuation against our own belief*, would pretend: namely, to *prevent* our fancying that he was, or *could be*, more than man; not to *prevent* our fancying, like the *Docetæ* of old, that his human body was a mere phantasm; but expressly to show, that if he were man, as undoubtedly he was, it was only out of mercy and condescension that he *became* such, in order manifestly and visibly to triumph over both sin and death, in *that very nature*, which, but for his interposition, had irrevocably sunk under their power.

We must not, therefore, suppose that when our Lord is spoken of as *man*, or the *Son of man*, even though it should be *emphatically*, that it derogates any thing from his divinity. The emphasis lies all the other way; it being necessary occasionally to lay some stress upon it, as an *assumed* manhood, lest we should doubt, as well we might, that if he were mere man, he could not have accomplished for us, what

Christianity assures us he *hath* accomplished—he could not, for instance, have made atonement for sin; “One man cannot redeem another,” saith the Psalmist “nor give to God a ransom for him,” *Ps.* xlix. 7. He could not have paid the forfeit and penalty of *death*, and yet *live*. He could not have raised his own dead body from the grave. He could not have given life and immortality, by a resurrection of the dead, to those who were judicially dead in sin. None of these things could any mere man do, or if they could, why are such things ascribed exclusively to Christ? This is a question the Socinians must answer, who allege, that he came into the world, or was born, merely to be a prophet and example of righteousness, or a teacher of the will of God to mankind, and died only to bear witness to the truth of his precepts; but did not Moses, and all the succeeding prophets, come into the world to be teachers and examples, and expounders of the will of God, many of them also sealing their testimony with their blood? Why is the death of Christ spoken of as more than a mere testimony to the truth of what he taught? Why is it represented as a propitiatory and vicarious sacrifice? Why did Christ himself say, he “came to give his life a *ransom* for many?” And why was this so readily assented to by Paul, “Christ gave himself,” says he, “a *ransom* for all.” Could these things be said of Moses, or Jeremiah, or Peter, or James, or Paul? Are we justified by the grace of God through the redemption which is in Moses? Did Paul make peace by the blood of *his* cross? Was Peter, who also died on the cross, a propitiation, an *ιλασμος*, the means of appeasing the anger of God, of recon-

ciling him to us, and rendering him propitiatory to sinners?

But there are in Scripture other marked differences insisted upon: as when we read that THE MAN by whom "came the resurrection of the dead," was born *miraculously*, in fulfilment of *antecedent prophecies*; when we read that he was born of a *race and lineage foretold*; at a *time foretold*; in a *place foretold*; that he was a being, who for particular ends and purposes, was "*made man*," was "*made flesh*," "*took our nature upon him*," became "*a partaker of flesh and blood*;" what can we conclude, but the being so spoken of was *man*, in a way that no other of the human race ever was man?

And this will appear still more plainly, if we look to the character given of him in other parts of the same chapter. We are there told that the *first* man, the man by whom "came death," was made "*a living soul*;" but what living soul, we may ask, after the transgression of our first parents, could *overcome death*? could *counter-work* what death had done? for that is the true force of the original word. Certainly no condemned or merely living soul could do this; and therefore the Apostle is careful to tell us, in the same place, that the *second man*, that is, our Lord Jesus Christ incarnate, who *did* overcome death, was not made simply a living soul, but also a "*quickeningspirit*." Which is no less than to say, as is said of him in other parts of Scripture, that he had "*Life and immortality in himself*;" that as man he could in his body pay the penalty of sin, and as the everlasting Son of God, and one with the Father, remit it also by virtue of his own atonement, and by raising

us from the dead, admit us, through faith in him, to all the joys of heaven.

Finely is this all expressed in the hymn we so often repeat in our public services :

“ Thou art the King of Glory, O Christ ;

“ Thou art the everlasting Son of the Father.”

(A clear acknowledgment of his divinity.)

“ When Thou tookest upon thee to deliver man :
thou didst not abhor the virgin’s womb !”

(A plain intimation of the *assumed* manhood).

“ When Thou hadst overcome the sharpness of death, Thou didst open the kingdom of heaven to all believers.

“ Thou sittest at the right hand of God : in the glory of the Father.

“ We believe that Thou shalt come to be our Judge :

“ We therefore pray thee, help thy servants, whom thou hast redeemed with thy precious blood.”

To show that these doctrines seem to flow naturally from the words of the apostle, I shall copy the following remarks of two of our most eminent divines.

“ The manhood,” says Archbishop Usher, “ could suffer, but not overcome the sharpness of death ; the Godhead could suffer nothing, but overcome every thing : he therefore that was to suffer and overcome death for us, must needs be partaker of both natures, that being *put to death in the flesh*, he might be able also to *quicken himself* by his own spirit.”

Bishop Pearson hath also the following observation :
“ If Christ were not the life,” the dead could never live ; if he were not the “ resurrection,” they could never rise ; were it not for him that liveth and was dead, and is alive for evermore ; had not HE the

keys of hell and death, *we* could never break through the bars of death, or pass the gates of hell.

In confirmation of all that has been said, the apostle, in the chapter before us, enters into further comparisons, he observes, that the *first* man, was of the earth, earthy; but the *second* man, heavenly: or as we read it in our version, the “Lord from heaven:” that “as we have borne the image of the earthy, we shall also bear the image of the heavenly:” that there are bodies terrestrial and celestial, and that the glory of the latter differs greatly from the glory of the former, that there is a natural body and a spiritual body, “howbeit that was not first which is spiritual, but that which is natural, and afterward that which is spiritual;” which is as much as to say, that as we are here, for a short time, to live an *animal* life in *animal* bodies, so we are hereafter to live a *spiritual* and ever durable life, in *spiritual* incorruptible bodies. “The body we have here,” says *Locke*, on the passage, “surpasses not the animal nature—at the resurrection, it shall be spiritual. There are both animal and spiritual bodies; and so it is written, the first man *ADAM*, was made a living soul; *i. e.* made of an animal constitution, endowed with an animal life; the second *Adam* was made of a spiritual constitution, with a power to give life to others.”

All this is so entirely consonant to what I have said above, that I could not resist availing myself of so high an authority, to prove that Christ was undoubtedly the *second* man, and the *second* *Adam*, in the view and contemplation of the apostle, for the Jews had these distinctions, though in a different sense.

“But why,” it may be asked (indeed I think it *has* been asked), “should the Redeemer, notwith-

standing there were many millions of men in the world between him and *Adam*, be called the *second* man?"

The answer has been judged to be very easy—because these two men were the only men who could be accounted the prime fountains from whence all the rest of mankind did derive their existence and being; from the *one* (the *first* man), by carnal generation; from the other (or *second* man), by spiritual regeneration; but the answer, I think, admits of being carried farther, for as in the *first man*, the image of God was defaced by sin, the *second man*, as head of the new creation, interposes to restore and renew that image, regeneration, in its effects, being the restitution of the same image of God, in which man subsisted before the fall. It is the remark of *Witsius*, in his work on the Economy of the Covenants (*de Œconomiâ Fœderum*), that the passage in Genesis, "Let *us* make man in *our* image," is equally applicable to both covenants, and marks the consistency of the whole; the same *economy* (*i. e.* of a triune God) which appeared in the works of *creation* and *nature*, being now revealed to us in the works of *salvation* and *grace*. Compare Ephesians iv. 22—24, and Colossians iii. 9, 10, with *Wells's* Paraphrase.

PART II.

HAVING I hope, sufficiently shown in the foregoing part of my work, that in the opinion of St. Paul, Christianity is so entirely founded upon the Mosaic history as to admit of no separation, and that of course the credit of Moses is at the bottom of every thing connected with the faith of a Christian, I purpose next, without departing from the chapter originally selected for discussion, to show how regularly the truth of the Mosaic history may be proved from St. Paul's reference to it.

The world is already in possession of a most valuable work by a living prelate, purporting to be a treatise expressly on the "*Records of the Creation*," to which, of course, nothing remains to be added in proof either of the moral attributes of the Deity, of the credibility of the Jewish History, or, as a necessary consequence, of that of their great leader and legislator, as it is usual to call him.

But I know not that the *records* of the NEW creation, have ever been so directly or effectually brought forward in confirmation of the records of the *old* creation (if I may so speak), as to place both on exactly the same footing, not merely as regards Jews or Christians, but the whole race of man. That is, *man*, in all places and all countries; *man* as the only rational inhabitant of this earthly globe, but above all, *man* as the fallen, but restorable image of God; the subject

of all God's mercies in the great and stupendous mystery of redemption; for it never should be overlooked or forgotten, that Christianity is, as a sensible writer has well observed, *essentially* the religion of *fallen beings*.

Since the science of geology has become so attractive, and consequently so fashionable, and new theories of the earth, or at the least, new expositions of terrestrial phenomena, are superseding each other in rapid succession, we are continually in the way of being told that Moses was no philosopher; that it is not reasonable to look to him for any resolution of existing difficulties, or as a referee upon subjects purely scientific. All this may be true, and yet, without being a philosopher, he may be found to have given us information far more to be relied on, than all the systems of *mere* philosophy extant, whether old or new.

For, it remains to be seen, whether as an *historian*, he has not given proofs of a knowledge of things altogether supernatural, considering the circumstances in which he must have been placed; and if this be the case with him, as the *historian* of MAN, and of human concerns, it must lead to a strong presumption, that he cannot, in any instance, greatly have misled us in regard to the history of the *earth*. The latter topic must, however, be reserved for future consideration.

I now, therefore, return to that celebrated chapter of the Bible, the fifteenth of St. Paul's first Epistle to the Corinthians.

I consider it must have been a degree of *inspiration* or *supernatural light*, that could alone have enabled, or rather *emboldened*, the apostle to write as he *did* write in this chapter, to the people of *Corinth*. For

it is now time to observe more particularly, how confidently he tells them, *not only*, that “as by *man* came death, by *man* came also the resurrection of the dead;” but that, “as in ADAM all die, even so in CHRIST shall all be made alive.” In the former declaration there is no distinct mention of *Adam*. That he was “the man” by whom came death, is well enough understood by ourselves without any mention of the *name*, and might have been well enough understood by the *Jews* who dwelt at Corinth, where indeed there was a synagogue. But this could be no great help to St. Paul; for whatever his countrymen might know or think of a first man, or a first Adam, their prejudices, generally speaking, must have operated strongly against the apostle, as to the *second* Adam, or in other words, as to the character our Saviour sustained upon earth.

In one sense, indeed, the Jews, however adverse to St. Paul’s account of our Saviour, as the second Adam, must have been a help to him; Corinth was not so far from Jerusalem, as to favour any imposition, with regard to the appearance, life, acts, &c. of our Saviour. It must have been easy for them to ascertain the leading facts of the case, (especially having Jews on the spot to refer to)—had the Corinthian Jews been able to deny positively that any such person as Christ had appeared in Judea, worked miracles, been put to death, and appeared alive again to many competent witnesses, they would no doubt have done so; ignorant they could not be of these things; all the dispersed Jews carried on a continual correspondence with Jerusalem, and many visited it every year. The apostle Peter was yet alive, and probably many of those to whom he had appealed as *eye-witnesses* of the

resurrection, in his memorable address preserved in the Acts of the Apostles, chap. ii.

Had St. Paul converted *no* Jew at Corinth, the very facts on which he rested his whole argument or doctrine might have been brought into question, but the conversion of Crispus, “with all his house,” Acts xviii. 8, a person who was actually “chief ruler of the synagogue,” was sufficient to show, that the facts of our Saviour’s appearance, life, miracles, &c. were held to be indisputable even by those who, upon the common prejudice against our Lord’s pretensions to the Messiahship, were otherwise so violent in their opposition to the apostles’ preaching; so violent, indeed, as even to provoke the Greeks themselves to take part with St. Paul, and induce Gallio, the Roman Deputy, to dismiss with disdain, the accusation brought against him, pp. 14—17.

Paul’s situation at Corinth indeed was for some time most trying, and that he actually needed a divine impulse, to encourage him to bear up against the disadvantages of it, is plain from Acts xviii. 9, 10, not only the rudenesses and violence of the unbelieving Jews, but the learning, comparative politeness, and grandeur of many of the Gentile inhabitants of the city, had such an effect upon him, that he did not hesitate to acknowledge, that at first he was amongst them in “fear,” in “weakness,” and “much trembling,” 1 Cor. ii. 3.

It remains to be shown how very much the view taken of Christianity by the apostle in this particular chapter, must have run counter to the prejudices of his Gentile auditors, as well as to those of his own countrymen the Jews. The *second* Adam only was the stumbling-block to the latter, but to the

former, the *first* Adam, if we take into account the exact state of the Gentile world, in point of knowledge as well as other things, in St. Paul's days, must have been little less than a subject of mockery.

The apostle's expression, "as in *Adam* ALL die," was not merely a confirmation of the Jewish Scriptures, but virtually an abolition of all conflicting records. It was not merely the establishment of a divine doctrine, but of the *only true history and chronology* of this habitable globe. It was to tell the proudest and vainest people upon earth, that they were little better than outcasts from the Israel of God, and had but one common ancestor with the despised Jews, a circumstance which it may be reasonably concluded, they were fully prepared to resent; for, if they knew any thing of Adam, it must have been through the Greek Version, well known by the name of the *Septuagint*, which was itself so ill received by the Greeks in general when it first appeared, as to be the *very occasion* of the publication, in the same language, of the extravagant computations of time past in the histories of Egypt and Chaldæa by Manetho and Berosus. It has been reasonably enough conjectured by the learned, that these histories being made public in the Greek tongue at the very period when the Jewish Scriptures were translated into that language at Alexandria, were expressly intended to invalidate, and render ridiculous in the eyes of the world, the *chronology* of the Jews; indeed, so prone were the Greeks to magnify their own antiquity—to pretend that their history reached beyond all records, and that in fact they had sprung from the earth, that they cared not for any pretensions on the part of other nations. Thus, Herodotus could easily be brought to speak of *myriads* of years, as

in fact he often does, and as well as his countryman Plato, bear to be told in Egypt of dynasties of kings reigning for ten, twenty, and *twenty-three thousand years*; which latter was the exact period assigned by the priests of that country, in their communications with *Diodorus* to the succession of their kings from *Osiris* to *Alexander the Great*.

So notorious, indeed, was the vanity of the *Greeks*, that though the coincidence in point of time, between the version of the Hebrew Scriptures and the Egyptian and Chaldæan histories, has led to the supposition, that the chronology of the Jews was chiefly aimed at, yet *others* have thought that *Manetho* and *Berosus*, the authors, or rather first manufacturers of *such* marvellous antiquities, both wrote in *Greek*, to mortify their *masters*; the Babylonians and Egyptians being at that time under the dominion of the Greeks.

Be this as it may, it is of great importance to the credit both of St. Paul and Moses, to know, that such jealousies existed at the time I am writing of, as will hereafter appear.

For it is very evident, that if the human race did not begin as Moses has represented; if *Adam* were not, as the Jewish records assert, the first and very head of the whole race of man, it was in the power of any nation, by extravagant computations, fabricated records, &c., to carry back the age of the world, or commencement of sublunary affairs, to any point on which they should choose to fix. In the uncertainty to which those must have been liable, who either knew nothing of *Adam*, or disputed the history of Moses as preserved amongst the Jews, they had it manifestly at their option to make the world ten thousand, or ten thousand times ten thousand years

older. And indeed where no such check has prevailed, they appear to have made full use of this liberty, for the very highest of the numbers I have mentioned have been exceeded by some. I should be afraid to mention the amount of the *Hindu* computation of one thousand fifty millions of years, if such extravagancies had not afforded to learned persons a clue, whereby to resolve, and bring into a wonderful agreement, the antiquities or rather pretended antiquities, of *many* nations; the latest and fullest application of this *clue* being reserved for persons scarcely yet cold in their graves. Of the nature of this clue some idea may be formed, from a reference to the Hindu computation just mentioned. The chronology of the Hindus is principally divided into *four* ages, all of an extravagant length; the largest period extending to the immense amount of nearly *two millions* of years; the second and third ages together, *more than two millions of years*; and the fourth or present age, is, by their accounts, to last upwards of four hundred thousand years.

Now, it is certainly remarkable, that making every allowance that could be claimed for the antiquity of the astronomical tables of the Hindus, on which such extravagant computations are supposed to depend, they do not appear, as historical records, to carry us back further than to such a period as might well be brought into agreement with the Scripture chronology. I do not say into exact agreement, nor is the agreement to be traced directly; but yet into a degree of conformity not at all to be expected, if the world be either so old as the Hindu records pretend, or, which is more remarkable, at all older than the Mosaic era of creation, according to the largest Scriptural computation ex-

tant, I mean that of the Septuagint. According to this computation, the commencement of the fourth Hindu age, in which we are supposed to be at present, does not carry us beyond the era of the Noachic deluge, which era, according to the common copies of the LXX, is 3028 before Christ, and Mr. Bailly, who entered largely into the subject, had fixed the commencement of the fourth Hindu age at 3102 B. C. And as every Indian age is supposed to be terminated by a deluge, all this part of their chronology and history is strictly *postdiluvian*. The first two ages are entirely set aside as fabulous¹: we have, therefore, only the two last ages for the history of man, amounting according to the Hindu computation, to 864,000 years added to what is expired of the supposed current age; but as the former is held by Mr. Bailly to have consisted, as was common, of lunar years, or years of months, upon reduction they are brought down to 2400 solar years, which added to 3102, the years supposed to have elapsed from the commencement of the fourth age to the Christian era, make in all 5502 years; leaving a difference of only *six* years between this account and one computation of the LXX. There is a computation indeed extant which brings it within *two* years; viz. 5500, the computation of Julius Africanus, Theophanes, Eutychius, and others. All this I had much more fully explained in my Bampton Lecture, now out of print.

It would be most unreasonable to suppose it at all probable that St. Paul could have known any thing of the artificial manner, in which some of the tables and computations I am speaking of, have been

¹ In fact sixteen out of eighteen were discarded by M. Bailly.

constructed and put together, and yet if any of these reckonings, Egyptian, Chaldean, Phœnician, Indian, or Chinese, could have been supported by *facts*, his mention of *Adam*, as the *progenitor* of the *whole human race*, would and must have betrayed the weakness of his cause, especially to the proud and disputatious Greeks, whose reputation for learning was so great at that very time, that the Pagan world in general was, as *Josephus*, complains, notoriously disposed much rather to trust to their bold assertions, than to the sacred oracles of the despised Jews.

It was but a short time before St. Paul wrote his first Epistle to the Corinthians, that the celebrated grammarian, *Apion* (or *Apianus*), had been expressly dispatched on a mission to Rome from Alexandria, to lay a complaint against the Jews, before *Caligula*, in which it seems, from the learned and able reply of *Josephus*, to have been one of his chief objects, to dispute the alleged importance and antiquity of the Jewish nation. Here then is a case in point. It must have been a most critical time for St. Paul to fix upon, in which to introduce the name of *Adam*, as of the *protoplast* (to use a term of those very ages) or progenitor of mankind. The time of *Adam*, when once the attention of the Gentile nations could be sufficiently drawn to the fact, was established by the Septuagint or Greek version of the Old Testament, which, to say the least, had assigned, comparatively, so very low an era, for the origin of *man* (to say nothing of the *earth* at present) as naturally to excite surprise, if not absolute contempt. It was as much as to say, in short, in the face of computations or assumptions reaching back to thousands and thousands of years, or even of *ages* (for so they have

been sometimes called) that the true history of man extended no farther back than to about four or five thousand years at the utmost.

But Indeed, St. Paul had openly proclaimed the same truths before the Areopagites at Athens, noted as it was, above all the other cities of Greece, for its devotion to *religion*, as we are told by Josephus, and perhaps I might add Sophocles; justly apprehending that an ignorance of the true origin of man, lay at the bottom, as it were, of their polytheism, he particularly exhorted the Athenians to *consider* that they were all derived from *one* stock, and all equally "the offspring" of one God; as certain even of their own poets, Aratus for instance, Paul's own countryman, or Cleanthes (see Doddridge) had said:—"God," says the apostle, "hath made of *one* blood, all nations of men, for to dwell on all the face of the earth, and hath appointed the *bounds of their habitation*;" which latter clause would seem to bear a strong reference to the system of *local* and tutelary deities, the very essence, as it were, of polytheism; especially, if we adopt the reading of the Septuagint, Deut. xxxii. 8, 9, which would run thus, "when the Most High divided to the nations their inheritance, when he separated the sons of Adam, he set the bounds of the people according to the number of *his angels*."

Some critics, I know, omit the word "blood," Acts xvii. 26, but this only seems to make the case stronger; for if the true reading be, "God has made of *one*, all nations of men," that *one* must, in the view of the apostle, have been ADAM, which would confirm all that we have been saying.

We must surely see in all this, the more than human courage and confidence of the apostle. Plato,

in his *Timæus*, had laid it down as a maxim, that it was difficult to find the author and creator of the Universe, and if found, impossible (probably from the inveteracy of polytheism) to discover him to all the world; and yet we have an apostle of the crucified Jesus, boldly discoursing of the one true and holy God, in the very sanctuary, as it were, of polytheism; for so Athens was certainly accounted, and as St. Paul himself probably meant to insinuate, when he told them that he perceived they were, “in all things too *superstitious*,” *δεισιδαιμονεστερους*, which perhaps has been better rendered ‘exceedingly addicted to the worship of invisible powers.’

Considering then, that in the judgment of most wise persons, the history of *man* is, as Paul represented it to be; that the Hebrew or Scripture chronology, is, at this moment, admitted to be the surest guide we have, and that after all the researches that have been made on the globe, as we are now able to affirm, *nothing of authentic history* has been discovered to invalidate (as far as regards *man* at least) the *Mosaic account of the origin of things*, we may well conclude; we may indeed be certain, that nothing less than divine inspiration, could have given St. Paul confidence enough to insist upon so low an era for the origin of man, or to point out ADAM as the head and progenitor of the whole human race, to the polished nations of Greece and Rome; the risk of contradiction must have been too great. The expression so often referred to, “as in *Adam* ALL die,” does so expressly carry us back to the Mosaic history, that there we are bound to make our stand. If St. Paul were right in his theology, Moses must have been correct in point of history, and both together

conspire to give us such a view of sublunary events and transactions, as will be found, I should think, to exceed in interest all that can be possibly supplied from other sources, as to the connection subsisting between heaven and earth, or in fact, between God and *man*.

We may not suppose that St. Paul knew *nothing* of the extravagant computations of the Gentile nations, because we have three remarkable instances of their being known to persons as nearly as possible, his contemporaries; Cicero just before him, and Diodorus Siculus, having referred to the Chaldean records for a computation of, at the least 470,000 years, and Josephus in his Tract against Apion, having cited both Manetho and Berosus, authors particularly implicated in the charge of falsification and premeditated perplexities.

It must be very evident that St. Paul as well as Moses, if uninspired, must have written at great hazard of contradiction, ignorant as he must have been of many unexplored regions of the globe; for in some of those regions, had the human race been older than he asserts, it could not but be possible, that more ancient records might come to be discovered, or some descendants of a *pre-adamitical* race be found: how much of the globe St. Paul might know we cannot pretend, nor is it necessary to ascertain: but it is rather remarkable, that we could nearly ascertain what he could *not* know, that is, what still remained to be explored. Two of the most diligent geographers of antiquity having been, as nearly as could be, the contemporaries of Paul, I speak of *Strabo* and *Dionysius*, whose works are well known, and from whom we have certainly derived as much geographical knowledge as could at that time be supplied, and it seems, as far as Strabo is con-

cerned, to amount to this ; the parts he describes were bounded on the north by the Baltic, on the east by the Ganges, on the south by the mouth of the river Senegal, and on the west by Spain. All the rest of the globe he seems himself to have acknowledged to be *terra incognita*, of which nothing but falsehoods had been reported to him.

This is sufficient to show that it must have been at very great hazard of contradiction, while so much of the globe was yet unknown, that St. Paul could have ventured to refer the most learned people of Europe, the *Greeks* and the *Romans*, to the *Jewish* records for the only true history of the world ; and the observation would apply still more strongly to Moses ; had the *latter* not been inspired, I do not say he could not have written what he has delivered, of the origin of the earth and of man, but this I *do* say, in which I have the support of *Grotius* and many others, that he could not have written it without such probability of contradiction and exposure, when the parts of the globe unknown to *him* should come to be explored, that it seems to be almost a moral impossibility, knowing all that we *now* know of the inhabited regions of the globe, and the absolute failure of all authentic conflicting or contradictory records, that any thing short of Divine inspiration could have supplied him with the information contained in the Book of *Genesis*. The most surprising, and yet the most credible book extant, all things considered, more credible certainly from the very extraordinary confirmation it received from our Saviour and his apostles, the apostle to the *Gentiles* particularly. For to what did *this* confirmation, let me ask, amount ? No less than to a second inspired or Divine assurance, that the true history of

the earth and of man, in their connection with each other, is only to be found in the Jewish records; thereby over-ruling and superseding all the fond conceits of the Egyptians, Chaldæans, Phœnicians, Greeks, and Romans, by revealing to them this great truth, that the progenitor of the whole human race was *Adam*, that Adam, by whose disobedience sin entered into this portion of the universe, and death by sin.

And as St. Paul (it may be added), thus ventured to speak of *Adam*, to the most polished of the Gentile nations, so did his companion, St. Luke, in the Gospel which he wrote, for the use of the Gentiles in Egypt and Greece, carry back the genealogy of the *Saviour of the world* to the *first* man; a remarkable coincidence when duly considered, whether that Gospel was written before St. Paul's Epistle to the Corinthians or long after, as seems to be the more general opinion. If before, it was a fit preparation for St. Paul's account of things; if after, a strong and very direct confirmation of it. St. Matthew's genealogy, designed for the *Jews*, ascends no higher than to the legal descent of the *Messias* from Abraham and David, in accordance with their prophecies and expectations; St. Luke, on the contrary, carries back the genealogy through his mother to *ADAM*, that the Gentiles might be sure that he was that "seed of the woman," who was to "bruise the serpent's head," and become the *propitiation* for the sins of the *whole world*.

It may still be asked, what effect had St. Paul's account of matters on the *learned* Greeks? for on the *unlearned*, impressions may be made, especially religious impressions, by statements little calculated to stand the test of severe criticism. An appeal to feel-

ings is very different from an appeal to facts. We see, however, that Christianity makes her appeal to *both*. The most enthusiastic may find in Christianity enough to satisfy their fondest expectations, while in point of history she defies contradiction.

Removed as we are from the Mosaic era of the creation by as many perhaps as six or seven thousand years, and from the commencement of the Christian era, by more than eighteen hundred, it is easy to say (though indeed these periods of time are nothing to what we shall have to speak of, when treating of the modern *geological* histories of the *earth*), but it is easy to say, that in such a lapse of years as the above amount to, so many ancient records must have perished and been lost, that it is absurd to expect, that in our days, any questions relating to the origin of the earth or of man can be satisfactorily decided. That St. Paul being a Jew, naturally adopted the *chronology* of the Hebrews, without overmuch inquiry or examination, and made converts only of those who were incompetent to such researches: I shall hope to be able to show that nothing could be farther from the truth.

The first answer I shall give, will be merely to copy the following eloquent description of the state of things from Professor White's very celebrated Bampton Lecture.

"At the time when Christ appeared, the Roman empire had reached the meridian of its glory. It was the illustrious period, when power and policy receiving aid from learning and science, and embellishments from the orators and the poets, gave law to the world, directed its taste, and even controlled its opinions. It was the age when inquiry was awake and

active on every subject that was supposed to be of curious or useful investigation, whether in the natural or the intellectual world. It was, in short, such an age as imposture must have found in every respect the least auspicious to its designs; especially, such an imposture as Christianity, if it had deserved the name."

Another author has observed of the writers of the New Testament, that they "lived in an age abundant with authors, full of most important historic circumstances, wrote in a language whose authors, if we only reckon from Homer to his commentator, Eustathius, occupy the vast space of twenty centuries; its subject is connected with the whole range of ancient history, sacred and profane, is interwoven closely with the records of the most civilized period of the classical age, and above all, is continued by a regular series of writers in the same language down to within four centuries of our own times."

We may now then proceed to consider how far St. Paul may be said to have met with the support of the *learned* of the Gentile world, principally as an *historian*; or, the maintainer, in so accomplished, learned, and inquisitive an age, of the extraordinary fact, that the whole human race began with ADAM, as Moses had represented.

And first, it is certainly remarkable, that St. Paul's beloved companion and fellow labourer, St. Luke, was born and bred a *Gentile*, and if he became a Jew, before he was converted to Christianity, as some think, it is plain that he must early and easily have been brought to discard the prejudices of Gentilism, for the true history contained in the Hebrew Scriptures; he, as well as St. Paul, has been judged to

have possessed higher worldly qualifications and knowledge than the other apostles, and to have been therefore specially raised up, to assist in forming the new Church and society of Gentile converts ¹.

But I have a few very strong cases to produce of a perfect acquiescence of *learned* Grecians in all that Paul asserted; a perfect assent, not only to the doctrines he taught, but to the chronology of the Bible.

The first instance is of *Theophilus*, commonly called *Antiochenus*; from the circumstance of his having been the sixth that filled the important see of *Antioch*. This very eminent father of the Church had not only been an heathen, but one so exceedingly well acquainted with the most conspicuous writers among the Greeks, as to render his belief, and consent to, the chronology of the Bible, almost as important as his conversion to Christianity; for living, as is allowed, in the second century, and almost therefore a contemporary of St. Paul, it is remarkable that he should not only have found reason to give up all confidence in the writings of his countrymen, as to any correct knowledge of God, and his providential government of the world, but *decidedly* as to the sacred chronology. Fully admitting all the grand epochs of the Scriptures, from Adam to the Babylonian captivity, and being at the pains to connect therewith the chronology of Rome, to the death of the Emperor Marcus Aurelius, and nearly to his own death, which happened but a few years after.

Here then we have an instance of an heathen convert of the very earliest times, writing as confidently as St. Paul himself of ADAM, as the *first* MAN; the

¹ Warburton's *Divine Legation*, vol. ii. p. 320.

Protoplast as he expressly calls him, in a treatise, still extant, displaying such a knowledge of the writers of antiquity as is quite remarkable; and which is the more important, because we have the authority of Origen for saying, that the *Jews* were notoriously unacquainted with the Greek historians; whatever credit therefore we may be disposed to give to St. Paul, for a degree of learning beyond the other apostles, it may not be supposed that he was acquainted with all the authors cited by Theophilus, any one of whom, for what he probably knew, humanly speaking, might have decidedly contradicted all he ventured to advance concerning the early history of man.

If any Jew had read the books cited by the learned prelate of Antioch, it must have been Josephus, who, according to the *belief* of Jerom, had studied and perused *all* the libraries of the Greeks; but if this were so, we may well leave to Josephus the vindication and defence of his own national antiquities.

I shall now give the names of the authors cited by Theophilus; and that not in any desultory manner, certainly not ostentatiously, but as any honest and anxious investigator of the truth might be expected to cite authorities.

He refers then in various places to Homer, Hesiod, Orpheus, Aratus, Euripides, Sophocles, Menander, Aristophanes, Herodotus, Thucydides, Pythagoras, Diogenes, Democritus, Heraclitus, Epicurus, Plato, Zeno, Cleanthes, Solon, Anaximander, Clitomachus, Carneades, Pherecydes, Leucippus, Protagoras, Critias, Euphemerus, Aristotle, Melissus, Parmenides, Anaxagoras, Phylemon, Aristo, Simylus, Chrysippus, Thales, Empedocles, Hippo, Dinarchus.

We shall do well to recollect how many centuries

this was, before the art of Printing was discovered, or rail-roads provided for the *march of intellect*. Joking apart, the amount of references is certainly curious, and may serve to convince us that he was no mean critic, having, as he tells us himself, an anxious desire to bring to the proof, both the assumed *antiquity* of the prophetical books of the Hebrews, and the divine origin of the religion to which he had been converted.

Here then, we have the full acknowledgment of a most learned heathen, that upon a fair and unshackled investigation of what I shall venture to call, the credentials of Christianity, he had been brought to the conviction, that the true history of the earth and of man, was to be found only in the Bible; his own words should be cited. "Thus we may be sure," says he, "that the whole time (from the creation), and the years (since) are discoverable by those who are willing to inquire after, and obey the truth."

And that this venerable father of the Church, knew what he was about, is clear from another passage, in which he alludes directly to the pagan extravagancies; "*some* of these writers," says he, "by declaring the world to be eternal, have boldly stretched and rashly launched themselves out into infinity; *others*, indeed, who acknowledged it to have been created, reckon up from the creation thereof, fifteen times ten thousand, three hundred and seventy-five years;" for those who are old fashioned enough not to be startled at a little Greek, *μυριαδας πεντε και δεκα και τρισχιλια εβδομηκοντα πεντε ετη* !

I must introduce another passage from this author, as tending to show, that perhaps we have in the work of this earliest Christian chronologer, a more

correct computation of the actual age of the world, than in our common Bible. “ Upon the sixth day, God made man, and man fell by sin; so upon the sixth day of the Chiliad (*i. e.* sixth millenary age of the world), our Saviour JESUS CHRIST came into the world, and saved man by his Cross and Resurrection.” It is very possible that this may be nearer the truth than the celebrated Usserian computation; it having the support of Josephus, and of the Septuagint. Theophilus reckons 5507 years from the creation to the birth of Christ, and is an authority very much regarded to this day¹.

The same author appears to have written another work, entitled Γενεσις κοσμου, or the Generation of the world, and in referring to which in his discourses to Autolyceus, he observes, that from that it would appear that the books on which those who, like himself, worshipped the true God, depended, were by far more ancient, and more abundantly true, than all the accounts of the philosophers, or poets of Greece; he is, indeed, very severe upon the latter, for pretending to know things, which, in their ignorance of the only true history of the creation of the world, and peopling of it, must have been merely fabulous, and in no manner comparable to the writings of Moses and the prophets, who lived not only very long before such writers were born, but before that multitude of *gods* whom they ignorantly worshipped. He compares with admirable effect, the inspired writers with the fabulous Greeks, in what they had delivered concerning the *unity of God*, the *formation*

¹ See Hales's Chronology.

of the world, and the creation of man. He excellently also shows, the superiority of the *Christian* to the *Pagan* morality, by some most judicious but *select* comparisons, declining to go at large into so copious a subject.

I have now done with Theophilus of Antioch. I shall next turn to another father of the same, that is, the *second* century, *Athenagoras*, whose case perhaps, in one respect, is rather stronger than the foregoing; for being a philosopher of *Athens*, “learned,” as is allowed, “in all the wisdom of the Greeks, as Moses was in the wisdom of the Egyptians,” he set himself formally to oppose the doctrines of Christianity, despising its pretensions, and questioning its history, till by a diligent study and perusal of the sacred writings, he totally changed his opinions, became converted like St. Paul himself, to the very faith he had been endeavouring to subvert, and of the superiority of which to all other religions, he became so convinced, as eagerly to turn his arms against the pagan systems of theology, pursuing them through all their turnings and windings, and showing them to be utterly absurd and ridiculous; all these things are to be seen in what are called his *Apologetics*, of which an editor of the work thus speaks:—

“Here may be observed, how the Christian exalts and raises the philosopher; how human learning in the Christian’s mouth is like arrows in the hand of a giant. Let them consider Athenagoras disputing with the Sophists of Athens; they will compare him to Moses, working miracles among the magicians of Egypt. The Sophisters make the appearances of arguments, but Athenagoras confutes and demon-

strates; as the magicians by their sorceries made the resemblance of serpents, but Moses the *true* one which devoured the others."

Another remark of the same writer, I cannot avoid mentioning as applicable to others besides Athenagoras. "Some of the ancient fathers were masters of such human learning, as makes it impossible to imagine they could suffer themselves to be carried away by any gross imposition. All were not called to follow our Lord and Master from *mending their nets*, or from the *receipt of custom*; St. Paul was called from the feet of *Gamaliel*, and Athenagoras from the schools of *Athens*."

Clemens Alexandrinus, another father of the second century, and by all accounts a most voluminous writer, had all his works descended to us, dwells, in his *Stromata*, (a miscellaneous work, as the title implies), on the utility of *philosophy* to a Christian, and extols it as being the instrument of preparing the Greeks for the reception of the Gospel; he speaks of the origin of arts and sciences, and the history of philosophy among the Greeks and other nations, and shows that the *Hebrews* were the *fountain* whence all these advantages had their beginning. Clemens, though established at Alexandria, was, as it is supposed, by *birth* an *Athenian*. *Hermias*, probably of the same century, became, upon his conversion, so persuaded of the futility of merely human attempts to resolve such questions, as Christianity alone could settle, as to have amused himself with writing in perfect derision of all the heathen philosophers, whose discrepancies and inconsistencies concerning the origin of things he particularly exposes.

I shall not attempt to descend below the second

century. My only object being to show, that when St. Paul wrote as he did to the *Corinthians*, of a first and second *man*, a first and second *Adam*, there were in the world learned persons, quite competent to investigate the truth, as regarded history, chronology, and religion ; and exceedingly capable of making that comparison between the writings of the apostle, and those of almost all the profane authors then known, as should lead them to the conclusion, so abundantly acknowledged in their works, that it is to the sacred records of the Jews and Christians only, that we must look for the proper history of the *Earth* and of *Man*, and of that communication between heaven and earth, which has for so long been received and acknowledged, as a series of divine revelations.

The following passage from a sermon of the Abbé de Cambacérès, preached before the French Court, in the year 1757, is very applicable and very eloquent. “ Vous me direz qu’ils (les Apôtres) usèrent d’adresse, qu’ils n’annoncèrent d’abord ces tristes vérités qu’aux pauvres, aux simples, et à ceux qui, par leur état, étoient moins éloignés de les croire. Eh bien, suivez les Apôtres dans leur marche, et voyez si c’est à la politique qu’ils doivent leurs conquêtes ? Où le prêchent-ils cet Evangile ? dans les villes les plus opulentes et les plus corrompues ; à Antioche, à Ephèse, à Alexandrie, superbes cités, où le luxe et la mollesse enfantoient les plaisirs et les crimes. Où le prêchent-ils ? à *Corinthe*, cette riche héritière des dépouilles de la Grèce, dont St. Paul nous trace une si vive peinture, et qui, fière de commander à deux mers, appelloit des bouts de l’univers la fortune et l’abondance : *Corinthe*, où comme dans un gouffre de volupté, étoient venus se rendre tous les désordres

et tous les vices ; où se trouvoit rassemblé tout ce que l'antiquité payenne avoit pu imaginer de corruption et de licence, tout ce qu'elle avoit consacré par les charmes de la poésie et de la peinture, par les fêtes, les jeux et les spectacles—voilà où paroissent *Paul* et *Barnabé*, où ils prêchent, où ils tonnent ; c'est sur cette terre ingrate qu'ils ôsent élever l'étendart de la Croix.—S. Paul enfin, dans ses deux Epîtres aux Chrétiens de cette ville célèbre la regarde comme la plus riche conquête de son apostolat, et la plus belle portion du troupeau de Jésus Christ."

Speaking further of the preaching of the Gospel to the Gentiles, "ses premières écoles," says he, "ont été les places publiques ; ses premières chairs, les tribunaux et les échafauds ; ses premiers auditeurs, les sages et les philosophes ; ses premiers triomphes, Rome et la Grèce devenues Chrétiennes au sein de l'idolâtrie."

The above extracts may serve to show how reasonable it is to turn to St. Paul's addresses to his Corinthian converts, for the most exalted and comprehensive views of the Christian dispensation.

In short, in St. Paul's admirable comparison of the first and second ADAM, in his Epistle to the *Corinthians*, we have the whole scheme of revelation displayed before us ; we have the beginning and end of things unfolded to us, and brought together, as the consummation of all our hopes, all our expectations, and all our future prospects.

Without *this* knowledge, man might still for ever "walk in a vain shadow, and disquiet himself in vain ;" but here, all difficulties which might perplex us, in regard to ourselves, our nature, history, and future destination, are solved ; without this knowledge,

there are in us all, contrarieties and contradictions, which might perplex and distress us from the cradle to the grave, such as the present corruptions, and, if I may so speak, *littlenesses* of our nature, compared with the grandeur of our hopes; the misery of man, as the sinful and sinning offspring of our first parents, compared with the glory of man, when made by adoption and grace, a child of God, and through CHRIST, an “inheritor of the kingdom of heaven.”

I have now shown, at the hazard indeed of offending against the taste of the times, by what are called learned references, that Christianity was not introduced into the world, as a religion that was to bear down men’s understandings, and supersede all inquiry. There could not have been a more direct challenge to inquiry given than in St. Paul’s address to the Corinthians; and we see it was a challenge taken up and accepted, by no mean combatants in the field of literature, of science, and philosophy; such as they were in those days; defective certainly; but by whom were these defects detected, exposed, and made known so effectually and so forcibly, as by *those* heathen philosophers, whose *eyes became opened* to the *superior* light of Christianity?

It is common to talk of the apostles as mere fishermen, and of Moses as no philosopher—were this all true to the letter, *believers* know well that divine inspiration could at any time have overcome such deficiencies; but it is to shame and silence the *contempt* of *unbelievers* and the careless among the educated classes, that I am anxious to show, that Christianity from its very foundation (that is, as intimately connected with the history of the *first Adam*), passed the ordeal of *critical* examination, eighteen hundred years

ago, and was pronounced to be indisputable, not merely as a divine relation, but historically and chronologically indisputable; and, therefore, not now to be set aside by any puny efforts of scepticism or infidelity; it need to be *contradicted* by positive and very clear facts.

If all that we see and know can be rendered intelligible to a certain extent by what we read in the books of Holy Scripture, and *no otherwise*, those who turn away from the information they might there find, must be left to reap the fruits of their own ignorance, for ignorance I must have leave to call it, being a defect of knowledge that might be removed. Nor should it be overlooked, that knowledge after all, is an acquirement capable of measurement, and I might add, of analysis—no person living can know every thing; nor can it be expected that the knowledge of any two individuals upon the face of the whole earth, should upon examination be found to be the same either in amount, substance, or quality; if we take account only of the *quantity* of the knowledge of any given individuals, as collected from casual observation, or study of books, it is very certain that we may arrive at very different results; the observation and study of one may have determined him to become a sound believer, while the observation and study of another may have made him an hardened infidel; and thus it is that persons accounted very wise, very learned, and very extensively informed, in a *worldly* point of view, may yet be grossly, nay inexcusably ignorant, of things of more consequence. To judge properly therefore of any man's knowledge as collected from the huge mass of information accessible to the public at large, it is almost as necessary to

ascertain what he has *not* read and considered, as what he *has*; a man whose knowledge may not be over-rated in point of amount, may yet fall into great mistakes as to what he really does *not* know. While there is no end to the things, that by diligent research, and curious investigation, *may* become known to *any* man, there may be a few after all that *should* be known by *every* man.

There can undoubtedly be no *truths* so important, as those which relate to heaven, the earth, and man its chief inhabitant; if these three be unconnected, it must be granted, that to “eat and drink, for tomorrow we die,” may be suitable enough to the short time we have to spend here; but if there be a book extant, of high and known character, which treats largely and most seriously of such a connection; and which in most plain terms tells us, that it is indeed, “appointed unto all men once to die,” but AFTER THAT, “the *Judgment*,” surely such information demands attention, and none can wilfully turn away from it without great hazard. It has been said, I know, and by persons reputed wise, that no man is accountable for his *belief*; but surely any neglect of proffered information on points of unquestionable importance, may render any man accountable for his *unbelief*, or at all events for his ignorance.

PART III.

HAVING now said almost as much as I intended to say of the sacred history of *man*, deliberately received and assented to, by most learned pagans, on the authority of St. Paul, as the minister of Christ, to the Gentile nations generally, but more particularly to the wisest and most accomplished of the Gentile nations, in fact the Grecians and Romans; I proceed to that of the *earth*, having of course, in this portion of my work, some observations to make on the researches and labours of our modern geologists. *Labours* I take leave to call them, for though I have not heard of their actually going to the bottom of wells to bring up *truth* from her *proverbial* hiding place, I have certainly heard much of their going to the bottom of most hideous caverns, in search of her, and of their having carried their researches so far, as to be able to tell us, not only all that has passed on the “heights above,” of this terraqueous globe, but almost all that is passing, at the present moment, in the “depths below.”

No man can be less disposed than myself, to depreciate the very curious inquiries of this eminent class of naturalists, though I shall hold myself excused from any obligation to declare, how many of their conclusions I am disposed to adopt, and from how many I have hitherto been led to withhold all concurrence. In truth, though I have passed much of my

time with geologists, been in communication with some of great celebrity, and even assisted them in making public the results of their inquiries, I must confess myself to be still a *learner*. I am not sure, but that instead of getting on, I am going back; at least, I have to forget and unlearn much, that I cannot say I had implicitly taken for truth, but which not very long ago, had interested me a good deal, supposing it to be at the least something like the truth. So little agreement has there been of late years amongst geologists themselves, that it brings to my recollection what is said of the ancient philosophers, by one of the early Christian fathers, just referred to in the foregoing part of my book.

“*Parmenides*,” says *Hermias*, “opposes *Anaxagoras* and *Anaximenes*; he who follows *Empedocles*, is drawn away by *Protagoras*; and from *Protagoras* by *Thales*, and from *Thales* by *Anaximander*. The fame of *Archilaus* is great, but *Plato* dissents from him, and *Aristotle* from *Plato*. *Leucippus* ridicules the doctrine of *Pherecydes*; those who follow the laughing *Democritus*, are called aside to a different system, by the wailing *Heraclitus*: *Epicurus* builds a world of atoms, and *Cleanthes* ridicules him for it. *Carneades* and *Clitomachus*, spurn preceding systems, and assert that the universe is incomprehensible; he notices further, the numerical mysteries of *Pythagoras*, and concludes from these discordant opinions of the heathen philosophers, that the truth was not to be found amongst them.”

With a variation only of the names, I much doubt if I could not from my own shelves, produce as long a list of discrepancies from the writings of geologists. But such accounts are easily to be found elsewhere;

most of our modern treatises on the subject, having sections expressly devoted to the consideration of former systems, older and more recent. (See Cuvier, Lyell, &c.) Some of these systems, as may be seen in Cuvier, are little better than a mass of most extravagant conceptions, however ingeniously put together. His review of former systems is very judiciously succeeded by a section on the "diversities of *all* the systems;" but then follows *his own*, parts of which have already a hard task to maintain their ground. Mr. Lyell's account of former systems is more copious, and extremely interesting; but while he does justice to some, whose principles had been misrepresented, I much doubt whether he does not do injustice to others, by mistakes or misrepresentations of his own.

I must return to a maxim of the incomparable Paley, noticed before, to the following effect.

"True fortitude of understanding consists, in not suffering what we know, to be disturbed by what we do *not* know."

There certainly seems to be a great number of curious points in geology, which we do *not* know, though books upon books are written upon them, and brought before the notice of the public every day¹.

Moses, in the mean while, is a good deal left to take his chance; he is pronounced to be *no* philosopher, and therefore no cosmogonist of any authority; but if, being no philosopher, he should have *so* written, three thousand, two hundred and eighty four years ago, as to derive in some remarkable instances, an extraordinary confirmation of the truth of what he wrote, from the discoveries of even our most modern

¹ Fairholme, p. 2.

philosophers, it must surely be granted that he had preternatural help.

Whoever takes up, though it be only for his amusement, some of our most recent works on geology, Mr. Lyell's for instance, will find, that it is supposed to be perfectly ascertainable, that operations have been going forward upon this earth of ours, indicative of a past duration of "countless ages," and yet it is by the same authors fully admitted, from the absence of human reliquiæ up to a certain period, in the examination of our *strata*, that the introduction of the human race was comparatively a recent event.

I am quite pleased with this discovery and acknowledgment, because it must have been quite miraculous, that a writer so unacquainted with philosophy, particularly geology, as Moses was, should have been able to fix upon so low an era, for the commencement of human affairs, having evidently had it in his choice, if not inspired, to have fixed upon any other period, in the wide compass of "countless ages." Moses was no philosopher; probably not, nor do I think he was any thing of a *sailor*, much less a *circumnavigator of the globe*.

How then, I would ask, could he have ventured to say *Adam* was the first *man*, when, for what he could know, there might, in some regions of the globe, have been a succession of human creatures, for "countless ages?" This is a case exceedingly deserving of attention; professor Playfair, in his illustrations of the Huttonian theory, admits that the objections raised against the high antiquity of the earth, "*would be of weight, if it at all interfered with the Scripture chronology, which it does not.*"—"That the origin of mankind," he adds, "does not go back

beyond six or seven thousand years, is a position so involved in the narrative of the Mosaic books, that any thing *inconsistent* with it would no doubt *stand in opposition* to the testimony of those ancient records. On *this subject*, however, geology is *silent*." Far otherwise, geology is *not* silent upon *this* subject: geology has spoken out as to the recent introduction of man, upon the present stage of human life; but could *Moses*, I may ask, have known that he might rely upon the production, in *time*, of such a remarkable *geological confirmation* of his narrative? I am not willing to rest my case upon proofs less intelligible than the above, and fully admitted at this very day; it seems therefore, to be of considerable importance. Playfair was satisfied to show that there was *no inconsistency*; but here we have a remarkable *consistency* discovered between the evidence of the earth, and the Mosaic record, and rather a *new* and *unexpected* one, not sought after by *physico-theologists*, but forcing itself, as it were, upon the notice and attention of professed geologists. At the same time, it must be observed, that the professor very properly speaks of six or *seven* thousand years, as the date of man's introduction, or creation, thereby including the *antediluvian* period, the fossil evidences of which will come to be considered hereafter.

Let us boldly and fearlessly at once give up all claim to the *marine* exuviae visible in our ancient strata, as *exclusively* proofs of the *Noachic* deluge; yet it must be acknowledged that Moses describes just such a catastrophe, as may have produced submersions of continents, and elevations of sub-marine strata, correspondent exactly with what the face of the globe at this time exhibits.

Moses was no philosopher—no geologist—granted ; but how then was he so wonderfully enabled to arrange the order of created things in such admirable conformity to terrestrial phenomena, as they now appear in a *fossil* state ? I do not cite Sir Humphery Davy's Table of Successions, because connected with the theory of an organic development, but I cannot refrain from introducing the following passage from Mr. Parkinson's "*Organic Remains*," expressly alluding to the six dominical days :—

"In the first of these periods," (or *days* of *creation*), "the granitic and other primary rocks were separated from the water (Gen. i. 9). That this separation took place, as is stated in the scriptural record, previously to the creation of vegetables and animals, is evident from no remains of any organised substance having been found in any of *these* substances. In the next period we are informed by Scripture that the creation of vegetables took place (Gen. i. 12) ; almost every circumstance in the situation and disposition of *coal*, accords with this order of creation. The creation of the succeeding period was that of the inhabitants of the water and of the air (Gen. i. 20). In the next period, it is stated that the beasts of the earth, cattle, and every thing that creepeth upon the earth were made (Gen. i. 24). The agreement of the situations in which the remains of land animals are found with this order of creation is exceedingly exact, since it is only at the surface or in some superficial stratum, or in some comparatively lately formed deposition, that any of the remains of these animals are to be found. The creation of MAN was the work of the last period (Gen. i. 26), and in agreement with his having been created after all the

other inhabitants of the earth, is the fact, that not a single decided fossil relic of man has been discovered. Thus a pleasing and perhaps unexpected accordance appears between the order in which, according to the scriptural account, creation was accomplished, and the order in which the fossil remains of creation are found deposited in the superficial layers of the earth. That so close an agreement should be found of the *order* of creation, as stated in Scripture, with the actual appearance of the depth of stratification which has been examined in modern times, must satisfy or surprise every one. Moses could not have learned this accordance from the Egyptians.”—Organic Remains, vol. iii.—Cuvier has made the same observations, and many others; see De la Fite’s Introductory Remarks; but they must stand upon their own merits.

It has been usual with *offended*, or perhaps rather too susceptible *believers*, to bring every part, almost every word of the Mosaic Cosmogony, and Noachic Deluge, to the test of natural philosophy. I should wish to take my stand on higher ground. I should wish to show that as Moses must have had preternatural help in some parts of his narration, it is not likely that he should have been allowed materially to deceive us in other particulars; and, while philosophers seem sure that they have found the right clue for the interpretation of nature, I should be disposed to ask, are they equally sure that they perfectly understand the narrative of Moses?

It may be thought difficult to ascertain exactly, the precise length of the six days of creation; much has been written upon the subject¹. It has been thought

¹ See Mr. Penn’s Comparative Estimate, and M. de la Fite’s edition of De Luc’s Letters.

that the mention of the evening and morning denotes one of our common days ; but it has also been alleged that before the *fourth* day, there could be no such evening and morning as we know now. Even *Origen* has noticed this ; I have nothing particular to say upon the subject. God's ways are not as our ways, one day with him, is, I am quite ready to believe, as a thousand years ¹ ; but I must *insist* on the *sacred* institution of the *Sabbath*. I discover in that appointment, so much of the real and ineffable goodness of God, as to feel quite persuaded, that it is an heavenly ordinance ; and, therefore, without stopping to discuss minutely, as some have done, the specific productions of each of the six days, or the exact length of those days, I have recourse to the fourth commandment, as a part of the Decalogue ; and, though I cannot pretend to say *how* God “in six days made heaven and earth ; the sea and all that therein is, and rested the seventh day,” yet so many things induce me to believe that the Decalogue, is, in its totality (as is actually declared of the *Sabbath itself*, Exodus xxi. 29), a *gift* from God to man, that I receive it as such, quite content to *take upon trust*, what I do not *fully* understand ; much in the same manner, as the generality of the world, *not being geologists*, pursue their journeyings, and “occupy their businesses,” on land, as well as “in” the “great waters,” without once thinking it necessary to ascertain, how the fabric of the globe on which they engage in such transactions, came to be exactly as it is.

I am not undervaluing geology as a distinct branch of knowledge, much less intending to insinuate, that

¹ See the first chapter of Mr. Bakewell's excellent Introduction to Geology, and Fairholme's first chapter.

it is a branch of knowledge adverse in itself to the credibility of the sacred writings; but as the books written upon the subject are becoming every day more popular and attractive, and may therefore fall into hands unprepared to draw the line between truth and hypothesis, between what the generality of the world, upon the surest principles of moral evidence, has a right to say, it *does* know, comparatively with what geologists themselves, when pushed to extremities, are ready to acknowledge, they do *not* know; I am barely seeking to interpose some *cautions*, to prevent *that* disturbance, which in my estimation, and according to Paley's admirable maxim, would betray a palpable weakness of understanding. The very curiosity which sets philosophers to work, is to be suspected, or at least, *watched*; "Toute la philosophie," says *Fontenelle*, "n'est fondée que sur deux choses: sur ce qu'on a l'esprit curieux et les yeux mauvais; ainsi les vrais philosophes passent leur vie à ne point croire ce qu'ils voient, et à tâcher de deviner ce qu'ils ne voient point."

Rousseau says much the same, "C'est une manie commune aux philosophes de tous les ages, de nier ce qui est, et d'expliquer ce qui n'est pas." I do not apply this to the very respectable geologists of our own country, nor yet to the very assiduous and minute *experimentalists* of *foreign states*, but shall have the means of showing hereafter, that in some parts of the continent, geology long ago occasioned such a disturbance of previously established truths, as is, I fear, to this day much to be lamented. It is the disturbance of such valuable information as we already possess, which I am anxious to prevent; otherwise

there can be no doubt, but that philosophy never took such cautious steps in its *own line*, as at the present time; Sir John Herschel's Discourse, so lately published, will sufficiently show this.

There must be great amusement, there may be much utility¹, in the pursuit of such researches and inquiries, as now for some time have occupied the attention of professed geologists; that is, of persons of real science, devoted to experiment, personal observation, and nice discrimination of mineralogical characters, localities, &c.; but, though these are justly to be distinguished from mere theorists, yet in all instances where their inquiries are checked, and I may say terminated, through a manifest failure of sufficient information as to *things past*, or *out of sight*², my mind turns naturally to the Book of Job;

¹ See an instance of this in Mr. Mantell's Introductory Observations to his Geology of the South East of England, from Herschel, p. 18. It is evident from the case referred to, that geology may be *negatively* as well as *positively* useful; positively by directing us safely to underground treasures; negatively by preventing us from pursuing any rash undertakings in the hopes of finding, what, under known and very ascertainable circumstances, cannot be found.

² In order to judge of the number of things still unknown, which may have caused, influenced, or modified, the operations of nature, in the production of terrestrial phenomena, I would recommend the reader to peruse the very sensible remarks of Mr. Bakewell on the agency of subterranean fire in the formation of rocks and strata, and on the formation of metallic veins.—Introduction to Geology, chap. xvi. xvii. Dr. Kidd's Geological Essay, may also be referred to, for many instances of phenomena, likely for ever to baffle our researches. Of all geological writers, however, I would refer to Dr. Macculloch, who, after denouncing every theory of the earth from Epicurus, to many of my own contemporaries, De Luc, Dolomien, and even Hutton and Playfair, in terms so *abrupt* and *disdainful* as to remind us of the old burlesque lines,—

surely there is One above, who may always be supposed to be in *such manner* contemplating our feeble attempts, to *measure* and account for, the operation of his hands. "Where wast thou when I laid the foundations of the earth? declare, if thou hast understanding. Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it? Whereupon are the foundations thereof fastened? or who laid the corner-stone thereof? Knowest thou it, because thou wast then born? or because the number of thy days is great?" Job xxxviii.; but the whole chapter need be repeated as a caution to the *over* curious and inquisitive of all ages. A caution (*that is*), not against *inquiry* but *rash* judgment; it is an extraordinary expression twice applied in the Scriptures to the works and ways of God, that they are *unsearchable*—that is not *to be traced out*, for that is the force of one of the terms used by the apostle, Rom. xi. 33, being a metaphor taken from quick-scented hounds, when they come to what hunters call a fault. When geologists come to a fault they do not always *acknowledge* it, but rush on, as though no impediment had occurred. Mr. Bakewell in his excellent introduction just referred to, gives some very just cautions upon this head.

"Nothing is more easy with a philosophical wit," says a sensible writer, "than to build or destroy a

It is, and it is not,
It is not, and it is,
And nobody knows but I,

does, in his following "sketch towards a theory of the earth," most candidly and in a manner equally abrupt, acknowledge his own ignorance. "I know not," "I cannot tell," "I will not presume to say," "I must leave it to posterity," and so on.

world ; but it is to be hoped, when they have wearied themselves with new contrivances, they will let us have our old world again."

"If we would give credit," says the learned *Dr. Nieuwentyt*, "to those who pretend to tell us such things as how God made the world, put all things together, produced and continued motion, &c., &c., we must needs conceive, that there was no more wisdom requisite to bring this glorious frame of the world into such a beautiful order as we see it, and to continue it in the same, than what the authors of such books were masters of."

I can forgive those who are really well versed in *physics* for any pious *attempts* to reconcile the Mosaic accounts of the origin of things, with what we know, or think we know, of the actual operations of nature, because the operations of nature, are in truth the operations of the Deity himself, who gave the powers and established the laws by which nature acts ; but even in this case, there is a difficulty of knowing exactly when God chose to act by his own previously established laws of nature, instead of his supreme, and all controlling *fiat* : without an admission of this *fiat* somewhere, I know nothing of *nature* ; after such an admission, I can, as I said before, freely forgive those who think they have detected in their researches any marked conformity between nature and revelation. On these grounds, I can forgive my old and very worthy deceased friend, *De Luc*, for his attempt to show how necessary to the first operations of the *chaos* (if there were any *chaos*), the introduction of *light* must have been ; and how consistently with the ascertained effects of light and heat (or fire), producing *liquidity*, Moses has described the presence of light to be one

of the *first* decrees of the Almighty (See his *Geological Letters to Professor Blumenbach, edited by M. de la Fite, 1831*¹.) But I can also forgive Mr. Granville Penn for *thinking* that without the intervention of *any chaos* it was *in the power of God*, to have brought this planet into existence for man's habitation by merely calling it, or rather commanding it into being. In both these cases much *must* depend upon *conjecture*, and where conjecture begins, I have

¹ It is probable that I may have no better opportunity of relating some rather remarkable circumstances connected with the above work. The date of its publication I have shown to be 1831; and, in a list of new works, bound up with it, the Letters of De Luc, which it contains, are openly stated to be, "*now first translated from the French.*" The reader may guess my surprise at reading this, when he is informed that I had myself translated them from the French, so long before, as in the years 1793, 1794, and 1795, not perhaps from the actual original Letters to Blumenbach, but from copies in De Luc's own hand-writing, supplied by himself, and countenanced, as I understood, by Blumenbach, who had previously translated them into the German tongue. The mistake was quite accidental. Nothing could be imputed to M. De la Fite, (since dead, I lament to say,) who began his book with an immediate notice of *my* translations, as they appeared in the old series of the "*British Critic*," and more than once refers to my Bampton Lecture (mentioning it always as the work of Dr. E. Nares, thereby distinguishing me from my late worthy relative, *Archdeacon* Nares, with whom I have been so continually confounded, that I much question whether my existence, as the author of my own works, would not be disputed to this day, in most of the booksellers' shops in London.) I could not well refrain from noticing this otherwise trivial affair, in referring to M. de la Fite's republication of *De Luc's* Letters, especially as Mr. Sharon Turner, from a note in his late very curious *Sacred History*, &c., appears never to have seen the Letters before. In the year 1798, M. de Luc having revised and partly recomposed his *Geological Letters*, published them again at Paris, under the title of "*Lettres sur l'Histoire Physique de la Terre.*" M. de la Fite having had the advantage of this last republication, his translation, of course, is so far preferable to my own; though the latter had, at the time, the entire sanction of De Luc himself.

recourse to God's word, *that* being the authority I can best *confide* in, wherever man's explanation of things falls short.

If I am not very inquisitive then about the **תהו ובהו** *Tohu-ve-Bohu* of Moses, as some writers have been (no doubt with the very best intentions), it is merely because I feel that the decision of any such question, as, whether there was or was not a *chaotic* mass of elementary principles, whence all things came to be what they are, by a mixture of chemical and mechanical processes, is not essential to the stability of my faith in the holy Scriptures; I am contented to know just as much as *Moses* has told us, namely, that "in the beginning God created the heaven and the earth," that is the heaven, and the matter at least of the planet, or perhaps of the whole planetary system to which we belong; and that at some given period, our own planet, the only one in the whole compass of the universe, with which we can pretend to be at all familiarly acquainted, was so unfit for the habitation of man, so unprovided with the abundance of things we *now* see around us, of use and ornament, comfort and convenience, as to be comparatively, "without form or void," or as Mr. Penn renders it, and perhaps with the weight of authority on his side, "invisible and unfurnished." I am not desirous of reviving a *chaotic geology*, if it may be said to be with general consent abandoned, but as the idea of a *chaos* has prevailed through many ages, and it seems doubtful whether the heathen poets from Hesiod downwards, did not obscurely refer to the account of Moses, I shall offer some remarks, on this well known origin of things, with a hope of, at the least, clearing away some injurious misrepresentations.

M. De Luc and Mr. Penn¹, may with good reason be brought forward at this time as the champions of the *chaotic* and *anti-chaotic* systems; the former having the support of almost all antiquity², the latter of Bacon and Newton, as he insists, and also of certain critics and Biblical scholars of no mean name, particularly Rosenmüller. I shall offer a few observations upon both, begging, however, to be understood as writing simply for the information of those who are *not* confirmed geologists, but in the way of becoming acquainted with the writings, lucubrations, and proceedings of those who *are*, many of whom, I am quite willing to believe, are not aware of the unfortunate tendency of some of the very terms and expressions used in the display of their opinions, and upon which I shall have to offer some remarks.

M. De Luc admitting a *chaos*, (as well described perhaps by *Ovid*, at the commencement of his *Metamorphoses*³, as by any writer before or since⁴), conceives it to have been an heterogeneous mass of elementary ingredients, incapable of reduction into order, without the addition of some principle⁵, which by

¹ To Mr. Penn may now be added Mr. *Fairholme*, whose geology of Scripture had not been published when this was first written: had I seen it in time, it is probable I might have relinquished the present undertaking; but some passages in Mr. F's introductory chapter, have determined me to proceed.

² Bampton Lecture, p. 279.

³ I refer to *Ovid*, because the very idea of a *chaos* is now so exploded by certain geologists, that I had rather have my reference to such a commencement of things attributed to a mere *school-boy predilection*, than to any more mature opinion of my own, as a cosmogonist, or philosopher; besides Mr. Lyell himself, very fairly refers to the same classical authority for some support on the part of Pythagoras.

⁴ See Lyell's reference to *Ovid*, xv.

⁵ See De La Fite, p. 43. 52.

producing *liquidity*, might give scope for chemical operations and combinations. To this *principle*, the very principle apparently wanting to Werner's own system¹, M. De Luc judged, that he had been regularly conducted by his philosophical investigations of the properties of *light*, and we ought not to wonder that having worked his way back, as it were, analytically to such a first principle, he should be struck with the extraordinary agreement between his assignment of the commencement of *physical* operations, and the first grand and sublime *fiat* of the Almighty, "LET there be LIGHT." For the credit of De Luc, this should be particularly attended to; he never meant to make more of secondary causes, than as he could trace them up to a first cause. The following I copy from a MS. of his own. "Is it possible to determine, from clear monuments, what has been the *first* observable *effects* produced, by *physical* causes, on our globe?" having as he thought found the first principle of such causes and effects, in *light*, the next step he knew to be to the *fiat* of God, as recorded by Moses. There his *physicul* researches terminated; he recollected possibly the magnificent but *unanswerable* question put by the Almighty to Job, "Where is the way where *light* dwelleth?" that he presumed not to say, but spake only of its *effects*, as a first *physical* cause. How very consonant is this, to the following passage in Mr. Whewell's Bridgewater Treatise; "if we establish by physical proofs, that the first fact which can be traced in the history of the world, is, that 'there was light,' we shall still be led, even by our natural reason, to suppose, that before this could occur, God said 'Let there be light,'" page 191.

¹ Werner's System, see Bakewell, p. 216, 217.

Mr. Penn totally discards all ideas of a *chaos*, or confusion of elements, as derogatory to the majesty and omnipotence of God, conceiving it to be most natural, as well as most decorous, to conclude that if this planet were ordained to become at any given time, the habitation of man, whatever appearances the solid parts of the earth may now bear of *chrySTALLIZATION*, *PRECIPITATION*, &c. they were called into being at once, as *FIRST FORMATIONS*, and entirely without the intervention of such secondary causes, as have been known to act since.

In both these cases, we have a *beginning* of things clearly assigned, and that in conformity to Scripture ; which is certainly not the case with other more fashionable theories. “The result therefore of this physical inquiry is, that we find no vestige of beginning, no prospect of an end.” (Theory of the Earth, &c. by *James Hutton*, M. D.) But surely the *first* and successive appearances of *organic reliquiae*, were so many direct vestiges of a *beginning* as to that portion of the creation ; and *one* beginning is, for our purposes, as good as a hundred¹. I do not indeed wonder that Dr. Hutton could find no beginning, for if all the continents that have ever appeared (according to his system), should have owed their structure and contents to the destruction of former continents, I know not what the first destructible continents could have been, except indeed such a *first formation* production, as Mr. Penn has *described* ; and then our own earth may as well be a first formation as any ; for if not eternal, it must at one time or other have been just as old, as we account it to be now, and

¹ See Buckland's Inaugural Lecture.

no older. There is another thing to be considered with regard to Dr. Hutton's *first* continent, if such ever existed; namely, that not having itself been subject to any of those destructive forces, incident to succeeding continents, it must have been destitute of all loose materials, such as sand, gravel, &c.; and in all respects different from our present habitable earth. I am sorry to see such an eminent naturalist as Mr. Mantell, in his account of the fossil organic remains of Tilgate forest, speaking without scruple of the *eternity* of the *past*; whereas the strata of the earth pretty evidently show, as it has been remarked, that there was a period, when *life* did not exist here. (See *Griffith's Cuvier*.) Mr. Whewell, in his Bridgewater Treatise, very rightly observes, that in the changes that have occurred upon the globe, there are evidences of *termination* as well as of *commencement*. Before I have done with a chaos, however, I would observe that there is a clause in the second verse of the first of Genesis, which would seem to tell both against M. De Luc and Mr. Penn, "*darkness*" being "*upon the face of the deep*," sounding very like the description of a turbid *chaos*, yet evidently needing not the presence of *light* (v. 3.) to produce *liquidity*; for what is called "*the deep*" above, is immediately afterwards called "*the waters*;" and though we should grant to Mr. Penn, the sanction of the older interpreters for the rendering *Tohu*, "*invisible*," yet the very terms used for "*the deep*," and "*the waters*," have not only been held to signify *tumult* and *turbid confusion*, but a state of *fluidity* also ¹.

¹ See Patrick and Parkhurst's Hebrew Lexicon, Arts. המָה and ים. According to M. De Luc indeed, water itself was originally only in its *elementary* state, and without *light* and *fire*, not *liquid*.

Be this however as it may, both systems may be considered, as far as the *intentions* of the authors are concerned (Mr. Penn may speak for himself, I can answer for M. De Luc) as very *pious* and *reverential* approaches towards the unsearchable things of God. M. De Luc's theory, however plausible as a beginning of chemical processes, cannot be *proved*, for we cannot take upon ourselves to say, that the condition of things was ever *precisely* such as he describes; Mr. Penn's idea of primitive formations independently of a chaos, cannot to a certain extent be *contradicted*; because we certainly cannot pretend to affirm that God could not as easily make a perfect world, as a perfect *man*, a perfect *tree*, or any other prototype of a future series.

As this however is the sum of Mr. Penn's reasoning in support of his anti-chaotic principle, of *first formations* in *all the three* kingdoms of nature, it ought to be mentioned that there is an exceedingly good note, in the appendix to M. de la Fite's book, partly supplied by the younger M. de Luc, to show, why Mr. Penn's idea of first formations, does by no means so *perfectly* apply to the *mineral* as to the *animal* and *vegetable* kingdoms.

It *may* therefore have been as M. De Luc says; it *may* have been as Mr. Penn says; and I must confess I do not yet see, why it *must* have been as those say, who equally deny M. De Luc's *chaotic* commencement of things, and Mr. Penn's *original formations*.

In venturing to say at the present time, that it may have been as M. de Luc says, I ought perhaps to let him speak for himself; for the generality of people are so apt to consider *fire* as an element, productive *alone* of all the effects it is known to operate, that it is almost

necessary to observe, that in De Luc's opinion, without *light* there could be neither *fire* nor *heat*. In a manuscript now lying before me, he asks, "What is fire? is it an element, or a compound?" and then reverting to his own very curious experiment in meteorology, conducted carefully according to the strictest rules and principles of Bacon, he asserts, that every thing had concurred to prove, that "*fire* the cause of *heat*, is a *compound*, formed of *light*, and of another *substance* which enters into the composition of almost all terrestrial bodies, and is disseminated in the atmosphere, gradually less and less as the distance from the base increases." Light, therefore, he concludes to have been essentially necessary to the very first chemical processes that could have taken place on our globe; without it, even *water* could not have become fluid. Mr. Fairholme seems to think, p. 54. that neither fire nor water were properly accounted for by the *chaotic* philosophers, but surely De Luc had tried to account for both; and I am the more concerned to make the observation, by what that respectable writer has said in his introductory chapter upon the same subject. It is impossible to think the following passage can apply to De Luc's theory: "In adopting *secondary causes* then, or the theory of the formation of the earth by the *mere laws of nature* from an *aqueous chaos*, we must account for *fluidity* without *heat*, an *effect* without a *cause*, and directly opposed to all the known laws of nature," p. 17. One might fancy this were written in *defence* of De Luc, who not only saw the need of *fluidity* as a *cause*, but found the *cause* in a *fiat* of the Almighty, which clears him of another charge, p. 16, the neglect or oversight of a GREAT FIRST CAUSE. M. de Luc deserves,

least of all theorists, to be confounded with those continental infidel philosophers, to whom Mr. Fairholme alludes in the same chapter, p. 4, as I shall have the means of showing. I shall make one more extract from Mr. Fairholme, as it literally expresses M. De Luc's mode of proceeding, were his theory in all other respects unexceptionable. "In entering then upon our geological inquiries, it appears the more natural course to proceed upwards, from material things as they are now presented to our senses, to the *First Great Cause* by which alone they could have been produced; and then, consulting such history as may be within our reach, to retrace our steps downwards, from the beginning of all things, to the present time." Now this was precisely the method of De Luc: he first discovered the necessity of *fluidity* to all chemical combinations; the need of *heat* as a cause of *fluidity*, and the need of *light* as a cause of heat; and surely he could not avoid being pleased to find, on turning to the only history he could consult upon such a subject, that the first recorded *fiat* of the Almighty, with regard to the surface of this planet was, "let there be LIGHT." Mr. Fairholme himself very reasonably observes, that supposing the *moon* to have been placed, on the first day of the creation, in the same relative situation as to the sun and earth she *now* holds, she could not have been seen from the earth, till the *fourth* evening of the Mosaical days, consonant to Gen. i. 14—19. Such coincidences may well be expected to interest the pious believer.

I am not willing to forego the knowledge, such as it is, of a BEGINNING, with which the Scriptures supply us; geology at the best, soon conducts us to a "*ne plus ultra*" barrier; beyond a certain point, all is *sup-*

position and conjecture. "In every department of nature," says Mr. Bakewell, "our inquiries are terminated by ultimate facts, beyond which further research *becomes* vain." As to the *destroying* and *renovating* processes now said to be going on, by *slow* degrees, I must beg to be permitted to withhold my assent. It is mere *supposition*; and if Mr. Lyell be fairly represented in a certain journal of rather a recent date, supposition upon supposition; "These powers, of fire and water," says the journalist, "as shown in the earthquake, and avalanche, the volcano and the flood, &c., *he* (that is the eminent lecturer referred to) watches in their *momentary* operations, and *multiplies* them in his *imagination*, by the effects of *ages*¹."

Now with all possible respect for Mr. Lyell, whose extensive observations and very able researches seem justly to have placed him in the highest rank of modern geologists, I must say, I do not like *imaginary* backward calculations, either in *history*, *astronomy*, *chronology*, or *geology*². I do not like to read, as I *have* read, of "the *infinity of time* giving to the discoveries of the *geologist*, the *sublimity* which is conferred by the infinity of *space* on those of the *astronomer*." The cases are widely different: of the infinity of space with respect to the heavenly bodies, we have almost ocular demonstration; of the infinity

¹ See Mr. Fairholme's remarks, p. 107, 108.

² We have a curious instance of the fallacy of such calculations in Cuvier, relative to the iron mines in the Isle of Elba. One writer, judging from the amount of rubbish carried out of them, having supposed them to have been wrought for more than 40,000 years; which from the *very same data* another author reduced to little more than 5000, and there is little doubt but that the latter also is much too high.

of time as regards this globe of earth, we have no *demonstration* at all; and as for the *sublimity* of such an idea, I must acknowledge that my mind is too dull to perceive it. To me the sublimity appears all on the other side. As far as regards the *omnipotence of God*, the shortest appears to be the most *sublime* account; and though I do not wish to be called upon to decide between those who contend for the strictly definite, or indefinite length of the *six days* of the creation, I cannot help believing that Moses has told us as much of the beginning of things as any of us *need* to know. Still, however, as to much that *remains to be known*, we are comparatively yet in the dark, and likely enough to continue so; though if science can fairly and experimentally attain to such discoveries, I am willing to grant that it never was more in the way to do so. I cannot forbear to copy the remarks of a sensible writer upon this head, though on some points I may perhaps differ from him. "That the external crust of this globe has undergone several changes and modifications, more or less general, and more or less violent, modern researches have proved satisfactorily enough: that these changes must have been successive, in point of time, is more than presumable from the character and state of the fossil remains found in the different formations; but though we are accustomed to talk of the *eras* of such formations, we are very far removed indeed from any thing like the precision of certainty on this point. Without the fossils nothing could have disproved the position that all the known strata of the globe had been formed simultaneously: but even with them no man can pretend to assign the *time* in which such and such formations were produced.

Therefore whatever may be asserted, concerning the immense antiquity of this globe, must be considered, if not false, to be at least conjectural. When they speak indefinitely of myriads of ages, which costs nothing, as *Cuvier* remarks, but a dash of the pen, or with greater absurdity, pretend to assign definite *epochs*¹, we cannot but admire the fancy from which such reveries proceed, and smile at the credulity which believes them."

In another place, the same author observes as follows :—

"And after all, are we much more enlightened respecting the recesses of the earth itself? what proportion does the degree to which we can penetrate bear to the diameter of the globe²? who can tell whether the impassable granite constitutes a solid nucleus of this planet, or reposes itself on other strata, concealing marvels as great, as those with which we are already acquainted, but unlike them, destined peradventure to remain for ever impenetrable to human investigation. Again, how small a part of the crust of the earth has been examined, and what proportion does that bear to its entire superficies? and, lastly, have geologists been invariably successful in disentangling the confusion of strata, in numbers of localities, and in accounting for the causes of such confusion³?"

¹ I know not whether this can be held to allude to such epochs as the following, of which Mr. Mantell writes, the "Iguanodon Epoch," the "Cretacious Epoch," the "Wealden Epoch," the "Elephantine Epoch," the "Modern Epoch," the "Human Epoch," &c.

² It is calculated that, after making the greatest allowances even for the depths of our seas, there would remain 7990 miles of its diameter, which must for ever remain concealed from our view.—*Fairholme*.

³ Griffith's Fossil Remains, 1830.

As to the remarks of the writer just cited, concerning the *nucleus* of the globe, and all that *may be* below the *impassable* granite, if I may make the observation without appearing impertinently ludicrous, I should say, that our geologists may (*fully* to satisfy their *curiosity*, and the curiosity of the public) have perhaps a journey to take, they little think of, and yet not beyond their powers; the “spirit of a geologist,” as has been hinted, being *free* to carry him “*per omnes terrasque tractusque maris, cælumque profundum*,”—Lyell. For if our earth be not as *Leibnitz* supposed, an extinguished sun, it is, according to *Buffon*, as all theorists must know, part and portion of the very body of the sun itself, and consequently composed of the same materials, granite of course included¹. Or if they should not like to go quite so far as the sun, they may stop at *Venus* or *Mercury*², and

¹ Lehman, director of the Prussian mines, in an “*Essai d'une Histoire Naturelle de Conches de la Terre*,” conceived all our primitive rocks to be parts of the original *nucleus* of the globe. *Buffon* himself considered granite to be the true solar matter, unchanged but by its congelation. One writer, Mr. Marshall, judged the earth to be formed from meteoric stones, which arriving from other spheres, *brought with them the organic bodies of other worlds*, whence the lost species of our own must ever be sought in vain, without at least, the powers of *Micro-megas*. “It is not surprising,” says Dr. Macculloch upon this, “that geology has been a subject of ridicule.”

² As useful itineraries for such a journey, I would recommend *Macrobius* in *Somnium Scipionis*, lib. i. c. 12, and Baron Swedenborg, on “the *Earths* in our Solar System;” but above all the *Itinerarium Exstaticum* of Athanasius Kircher, from which I could make many extracts exceedingly applicable to the subject in hand, very particularly as to the theory of De Luc, in representing *light* to be the very principle *wanting* to give scope for all those processes, by which the surface of the earth became what it is. Had the theorist seen occasion to express his ideas in Latin, I could have pointed out several passages in *Kircher*,

inquire if any of *their* inhabitants have found out what granite is; whether of *aqueous* or *igneous* origin? and whether any thing lies below it? for, if the earth be part of the sun, all the other planets are so also, and there is no knowing at this distance, what proficiency *their* physiologists may have made in the study of their respective habitations. Perhaps in their travels, they may learn something about that unfortunate planet, which seems to have received damage in its original projection from the sun, or afterwards, by collision with a comet; I mean the planet, supposed, not without reason¹, to have become divided into four parts, forming our newly discovered asteroids, or telescopic planets, as they are called, *Ceres*, *Pallas*, *Juno* and *Vesta* Is this mere banter? far from it. "If man," says Mr. Lyell, "could witness the birth of other worlds he might reason by induction upon the origin of his own." No person living can entertain more exalted ideas than myself of the immensity of the universe, and, as a consequence of it, of the *plurality of worlds*; and, though I look upon Buffon's system, to be in many respects but an amusing work of fancy, I am much disposed to think there is a great affinity in the circumstances of all the planets of our system. This

scarcely requiring the alteration of a word. He even calls *light*, in reference to a chaos, the *entelechia*, or principle of motion, tending to order and perfection. It may be said perhaps, that Kircher was a visionary, and no better a philosopher than Moses or De Luc; but he was very learned and very entertaining: and if we are to give up history, and struggle only for a preference of guesses and conjectures, I must say I like some of Kircher's guesses as well as any.

¹ See Turner's Sacred History of the World, Letter ii. p. 55, 56, and the *Annuaire* for 1832. See also Sir John Herschel's Discourse on Natural Philosophy, 308.

is no new opinion; very long ago I printed and published a treatise expressly on the *Plurality of Worlds*, designed to show, that as a philosophical opinion, it was *not inconsistent with the language of the Holy Scriptures*; that many of the expressions in the latter, in their original tongues, admitted of such an extension, as to include other worlds besides our own; and, that in reality the great scheme of *redemption*, might pervade all the systems of God's *creation*, as well as this; so that *universally* there should be found, where wanted, as well one MEDIATOR, as one GOD—ΕΙΣ ΘΕΟΣ ΕΙΣ ΜΕΣΙΤΗΣ (1 Tim. ii. 5), which was the title of my book. The book itself was quickly out of print, and being soon occupied with other things, I never applied my mind to the publication of a second edition; but on looking back to it, I find many things in it, applicable to the subject of which I am now treating, and a variety of authors referred to, in proof of the planets being all of *one creation*, as dependent on the same *sun* for *light*. Among these references, I find two treatises by Dr. Samuel Pye cited, published in 1765 and 1766, one entitled "*Moses and Bolingbroke*," the other, "*The Mosaic Theory of the Solar and Planetary System*;" he is at the pains to show that the first and second chapters of Genesis would, with very trifling allowances, as well apply to *Jupiter* or *Saturn*, and *their inhabitants*, as to the earth, &c. This was meant as an answer to Lord Bolingbroke, who had objected to *man's* being made by Moses the final cause or object, if not of the *whole creation*, yet at least of our system. The application of the two chapters is very ingenious, and I think just.

But our modern geologists are not over anxious, I

believe, to ascertain where our planet came from, or what other bodies are made just like it, or as mere theorists, to tell us how they themselves could, if they chose it, put such a globe as this earth together; but, seeing that it has been put together somehow or other, their object is to take it all to pieces, or as much of it at least as they can get at, in order to decide not only what may have happened to it, in time past, but what is likely to become of it, if it continue to proceed exactly as it does now, for ages to come, if not *for ever*; of which some *appear* to have very little doubt.

Geology is of late become so fashionable, that I ought not, perhaps, to suppose any of my readers to be so ignorant, as to need to be supplied with the outlines of Dr. Hutton's "Theory of the Earth." I shall however copy what Mr. Lyell says of it:—"The ruins of an older world," said Hutton, "are visible in the present structure of our planet; and the strata which now compose our continents have been once beneath the sea, and were formed out of the waste of pre-existent continents. The same forces are still destroying, by chemical decomposition, or mechanical violence, even the hardest rocks, and transporting the materials to the sea, where they are spread out, and form strata analogous to those of more ancient date. Although loosely deposited along the bottom of the ocean, they become afterwards altered and consolidated by volcanic heat, and then heaved up, fractured, and contorted." "He imagined, in short, that the continents were first gradually destroyed, and when their ruins had furnished materials for new continents, they were upheaved by violent and paroxysmal convulsions. He, therefore, required

alternate periods of disturbance and repose, and such he believed had been, and would for ever be, the course of nature ¹."

I am old enough to remember Dr. Hutton, as well as his principal opponent (for so Mr. Lyell seems to think him), M. de Luc. I am old enough to be able to confirm what Mr. Lyell states of the bad opinion entertained at first of Dr. Hutton's theory, as, at the least, a revival of the heathen dogma of an "eternal succession ²," and a denying that this world ever had a beginning; in justice, however, to Dr. Hutton, I am quite as willing as Mr. Lyell can be, to take my estimate of his principles, from his friend, biographer, and able expounder of his actual system, Professor Playfair, and to leave to him his defence and vindication. Of M. de Luc, however, I have certainly more to say; not wishing to see the principles and researches of so good a man, in any way, unfairly depreciated. Professor Playfair in particular has spoken almost disdainfully of his idea of the chaos being *penetrated* with *light* distinct from the solar beams; but to show how philosophers, geologists, and even professors may differ, Professor Ure, in his *Treatise on Geology*, has expressly declared, that he thinks Moses in *nothing more correct*, than in having described the creation of *light*, three days before that of the heavenly bodies. One of the Greek fathers, Gregory Nazianzen, calls the *light* of the *first* day, *ασωματον και ανηλιον*, as not then collected into a *body*, as we

¹ For more, see Lyell, i. 61, who does not quite agree about the periods of repose.

² It is odd enough that this *eternal succession*, was what some of the ancients called a *plurality of worlds*.

now see it in the *sun*. Professor Ure is upon many points very adverse to the Huttonian theory.

M. de Luc's works in general, will in all likelihood never be lost to the world; he was by far too great a naturalist not to have his observations and discoveries duly appreciated, and indeed immortalised. Of one of his works, "*Recherches sur les modifications de l'Atmosphere*," even Professor Playfair has very candidly said, "In that work, De Luc has succeeded where many men of genius have failed, and has made considerable improvements in a branch of the mathematics without borrowing almost any assistance from the principles of that science." Another testimony, not only to the abilities, but to the *character* of M. de Luc, I must hope to be allowed to transcribe, much of his merit being actually lost and obscured, by the almost sudden rise and appearance of *existing* geologists.

Of M. de Luc's "*Lettres Physiques et Morales*," the Monthly Reviewer, for 1780, vol. lxii. thus writes—"This work bears all the marks of a sagacious and experienced observer, a profound and original thinker, a sound logician, and a good man. It is filled with materials relative to the natural world, and the branch of philosophy of which that world is more peculiarly the object; and it exhibits rational, extensive, and noble views of the connection of nature with its AUTHOR, and with the moral and religious system of the universe. M. de Luc, who has hitherto been only known as one of the first natural philosophers of our time, assumes here new aspects, still more interesting to humanity, namely, those of the moralist, the citizen, the friend of man, who speaks the language of wisdom, to the peasant, the artist, the legislator, and the sovereign, and appre-

ciates with sensibility, truth, and precision, the genuine sources of human felicity."

But whatever praise may have been bestowed on his labours in general, if his *geology* in particular is become quite out of vogue amongst ourselves, as seems to be the case, I know it to be perfectly out of *my* power to render it otherwise. An opponent of Dr. Hutton, De Luc certainly was, but I do not think an unfair one. In some parts of Mr. Lyell's books he appears to me to have been misrepresented; but as to these matters, such mistakes are so ably pointed out in M. de la Fite's publication, as to render any thing I could say, quite unnecessary. My own individual opinion upon such subjects has long ceased to be of any moment; but as it was the fashion not long ago to encourage the publication of *recollections* and *reminiscences*, I shall hope I may be allowed to revive a few circumstances connected with both the above naturalists and both the systems. I trust I may be able at the same time to explain the reasons, why it has appeared necessary, at certain seasons, to those who have the great truths of the Christian religion at heart, to watch the movements of geologists (or at least, of their admirers), and prevent to the utmost of their power any false conclusions being drawn, from the judgments they pass on terrestrial phenomena. The public in general will I trust discover, that if I am writing with some degree of "*priestly*" zeal, I have sufficient respect for my own character, as well as for the peculiar age in which we live, when as it has been said, "*bigotry* in vain raises its *powerless* hands against *science*," not to commit myself further than the exact state of the case may seem to require. If in what I am about to relate, I shall be obliged to

mix myself up with the particular details of the narrative, the reader may depend upon it I shall do it neither willingly nor unwillingly; not *willingly*, because comparatively with the situation in which I stood, in the times alluded to, I have now very long lived in *obscurity* and *seclusion*; and there is not a living geologist whose works are not very much more recent than my own publications to which I must refer; not *unwillingly*, because I am glad to be still living, to bear my testimony to the honesty at least, and pious zeal of Dr. Hutton's great opponent; who may otherwise, as I observe, run a risk of being actually numbered among the continental geologists of the *infidel* school, though it is in my power distinctly to show, that continental infidelity was the very thing that induced him to become a geologist.

I have already observed, that in the years 1793, 1794, 1795, I translated the whole of "De Luc's Geological Letters to Professor Blumenbach," but as they were printed only in a periodical work, (the "British Critic,") they were, of course, not carried through the press very rapidly, so that De Luc himself had ample time to revise my translations, and I at this moment possess his own acknowledgment of their general correctness. Subsequently he made alterations and additions as has been shown.

It was not, I think, before the year 1802 that the "Illustrations of the Huttonian Theory of the Earth," by Professor Playfair, were made public. In 1805, I preached my Bampton Lecture before the University of Oxford, and in my sixth discourse (the whole being directed against the delusions of the age of reason), I considered at some length, the testimonies which the face of the earth *had been judged* to exhibit,

to the truth of the Mosaic writings. At that time the contest between the Neptunists and Vulcanists, was, as Mr. Lyell has shown, extremely warm, and the *neutral* party of which Mr. Lyell speaks, as the founders of the Geological Society in London, had not yet appeared; it was not before the year 1807 that that Society was formed. It so happens that in that very year De Luc addressed to me one of the last, and possibly one of the longest letters he ever wrote: it occupies eight large sheets of paper, and is written very closely; not in French, as was commonly the case, but in English. It is now lying before me; and as I do not know that any body ever saw it but myself, and its contents are very applicable to the subject of this treatise, more so indeed than I could wish them to be, I shall venture to introduce some extracts from it, and as much as possible in his own words; the *English* of a *foreigner*; entitled of course, to some allowances. It was intended as a sort of critique on my sixth Bampton Lecture, not altogether commendatory as will be seen. It is for De Luc's sake I notice it all—and to show that as a sound believer he had good grounds to be alarmed; a case I have lived to see rather rudely disputed.

“In your valuable work, the Bampton Lecture, you have clearly shown, how unphilosophical, even frivolous, are the *moral* and *metaphysical*¹ arguments against revelation; a subject which cannot be too often treated

¹ My Bampton Lecture, purporting to be a view of the evidences of *Christianity* at the close of the pretended *age of reason*, proposed to bring them to the test severally of HISTORY, CRITICISM, ETHICS, PHYSICS, and METAPHYSICS. The book is entirely out of print; its character, when first made public, may be seen in Archbishop Magee's celebrated work on atonement; see his Index under the name of Nares (Rev. E.)—3rd. edit. 1812.

by those who like you, are equal to the task. But you are also aware, that this is not sufficient in our times, when some natural philosophers, reputed learned, have pretended to derive from their study of the earth, that its history in *Genesis* is a *fable*; and this has engaged you to come forward, with the view of invalidating their pretended proofs, and of warning the *divines*, that this must become an object of their studies; for which my soul praises you¹.

“ This was *my* motive for applying to the study of natural sciences tending to geology, and as soon as I found myself in possession of sufficient means to refute those authors, I resolved to come forward against them. This I executed in my work, ‘*Lettres sur l’Histoire de la Terre et de l’Homme*,’ which I began to write in 1775, and published in 1780.

¹ It is exceedingly clear from Mr. Lyell’s first volume, p. 68, that he would be disposed to smile at such *simplicity*; but for my own part, I still wish that *divines* would look a little more about them, not geologically, that cannot be—it is laymen only who are clear of the penalties of non-residence—but *theologically*, and as regards the history of *man*: unless indeed they do learn to look about them, it would appear from Mr. Fairholme’s recent work, that they may involuntarily do great harm. I find in his introductory chapter the following passage:—“ Geologists without any knowledge of the original text (of Scripture), and *learned men without any knowledge of geology*, have, unintentionally formed a species of coalition, the effects of which strike deep into the very root of our confidence in Scripture, and sap the foundation on which our belief in the *omnipotence* and *omniscience* of an Almighty Creator ought to be founded;” for my own part, I am persuaded that geologists themselves, are often unaware of the evil tendency of their own expressions. Who would think that the author of the following sentence, could entertain *proper* ideas of God, and (as he *calls* them) “ the *sacred* writings?” After descanting largely upon the appeal we may *now* make to “ the *organic world*,” he observes, “ the book of *nature* is intelligibly written, if we can comprehend *her* language, and far better authority than the testimony of man, as to the works of *HER* creation.”—Fraser’s Magazine, Oct. 1832, p. 280.

“ From my connections with Germany as early as 1776, I kept the thread of the progress of a sect, which, by openly converting the Mosaic account of the world into a *mythology*, had by degrees effaced all *positive religion* from the minds of the people of every rank.

“ The corruption, especially in the protestant part of Germany, was at the fountain head. It proceeded from the professors of the universities and the clergy, who publicly taught, in their lessons and writings, and even in the pulpit, that *history* was no part of *religion*; this being *intellectual*, the other rested on *traditions* of old times in which there was no certainty. That man as a *rational* being had his *religion* in himself¹, which *every individual* could find with sufficient

¹ This idea of “ man as a *rational* being, having his *religion* in himself,” is so absurd, that it seems to me impossible that any truly rational being could for a moment entertain it. I have shown in a former part of this work, what a mystery man is to himself, according to the views of *Pascal* and *Young*, two persons not to be overlooked in such a case. The religion man is capable of finding in himself (if such an *uncertainty* can be called *religion*), explains nothing concerning the designs of God, as to what has already taken place, or what may be to come; and as for any satisfaction such a rational religion may convey to a doubting mind, I should as soon think of speaking of a rational *omnipotence*, a rational *creation*, a rational *mortality*, or a rational *resurrection from the dead*. It is certainly something singular, that while I was exposing here almost thirty years ago the fallacies of the boasted *age of reason*, De Luc should have been attacking the *rationalists* abroad; still more, that as he had to combat the illusion of a *progrès des lumières*, I should now be writing under some jealousy of a *march of intellect*, a march lately described by a learned person, at least as jealous of it as myself, to be, a “ march of youth against age, of inexperience against experience, of children against parents, and servants against masters; of cunning against simplicity and honesty, of folly against wisdom, of the idle against the industrious, of consumers against producers, and of money against land. It is the advancement of all the vices that have ever characterised human nature, and the retrogradation of the virtues; in

attention, or learn from those who have made *man* and *mankind* their particular study.

“In their lectures on *moral* philosophy, no other foundation of *moral laws* was presented, but the *order of things and fitness*, and in those of *jurisprudence*, the *nature of man* as an *independent* and active being, and *human laws*, were their only principles.”

M. de Luc proceeds next to give a long account of certain transactions at *Berlin*, whither he went on purpose, as he says, to combat infidelity, at “the head quarters of the revolutionary sect,” of which he had been writing. The time would seem to be now so far past, as to render it useless to copy what he says upon this particular subject; but circumstances have very lately occurred to render it otherwise, especially as he had for some time free access to the King of Prussia¹, who “with pleasure,” as he writes, gave him permission, not only to confer with him upon the alarming state of things, but to dedicate to him some of his publications; all of which he was so kind as to send to me at the time, and which I carefully preserve.

“When I arrived in that city (*Berlin*), two schemes were jointly carried on with appearance of success; you are informed of one of them, at least you speak in your Lectures of the work that I published on that occasion, but you did not know the event.”

short, it is the march of moral and practical ignorance, cant, and superstition, opposed to every thing that has hitherto been deemed valuable to man.” What follows is surely *libellous*, if any *prosecutor* could be found—“Never was the English nation half so ignorant of all really useful knowledge as it is at the present moment; never was it so completely the dupe of every political, moral, or religious impostor, who starts up to betray, as it is now.” Surely there is *some slander* here.

¹ Our own revered sovereign George III. had conferred on him a professorship in his dominions abroad, as a sanction to his proceedings.

I am sorry to say, the scheme I had alluded to in my lecture, was a very disgraceful communication between certain Jews of Prussia, and the head of the clergy, as well as inspector of the Theological press there, (or to apply the titles given him in M. De Luc's *Lettre aux Juifs*, Conseiller du Consistoire supérieur et Prévôt à Berlin,) in the course of which the former offered to abandon their religion and profess Christianity, if *both* might be reduced to a *rational* system of *pure Deism*¹; but as it was judged necessary by the Christians, that they should receive the initiatory rite of *baptism*, the form of the latter, to *accommodate them*, was to be *altered*, and they were to be allowed to be baptised only in the “*name of Jesus Christ, as a Doctor [Teacher] of morals far superior to those which they had followed.*”

The other scheme was, to “suppress the *religious* education in schools, under a pretence that children could not understand it.” That I may make no mistake in this, I shall copy the account actually sent to me in a memorial from Berlin, in 1793. “Il ne faut point (disoit-on) parler de *Dieu* ni de la *Religion* aux *Enfans*, car il n’y sauroient rien comprendre. L’Enfance est le temps de la *mémoire* et de l’*habitude*; il faut employer la première aux *elemens arides* mais *sûrs* des *arts* et des *sciences* qu’ils devront suivre; et

¹ In a letter of a much earlier date, his account of these things is thus stated: “Ces Juifs sont venus déclarer *ouvertement* qu’ils renonçoient l’Ancien Testament, n’en retenant que le *Théisme*; et laissant entendre qu’ils voyoient la *même disposition* chez un *grand nombre* de *Chrétiens* quant au nouveau Testament, ils proposent de se réunir sous le *Théisme.*”

“La Reponse de l’Ecclesiastique a paru; c’est le principal Ecclesiastique de Berlin, et il vend le Christianisme aux Juifs, comme Judas leur vendit son Chef.”

former la dernière à remplir les devoirs dont on leur fera sentir la nécessité : réservant les leçons de la *Religion*, pour les temps où leur *entendement* pourra les saisir et y *acquiescer*."

I wish it were in my power to copy many passages from De Luc's admirable Letter to the Apostate Jews upon the subject of a *positive revealed* law, instead of those "*liens de toile d'araignée, formés des conceptions humaines*," on which they were disposed to rely. The letter is lying before me, but the passages I should be disposed to transcribe from it, too many for such a work as the present—one however I cannot bring myself to pass over. "Vous respectez MOYSE, me direz-vous ; je le crois, et j'irai plus loin encore : vous avez appris de quelques écrivains Chrétiens, même d'ecclésiastiques, à accompagner ce respect comme ils le font en parlant de JESUS CHRIST, des expressions pompeuses de *vénération*, même *d'adoration* ; quoiqu'au fond vous ne considériez MOYSE, ni eux JESUS CHRIST, que comme des hommes de génie et de talens, qui *aujourd'hui* peuvent être surpassés par d'autres, *vu le progrès des lumières*."

How far such projects as those alluded to, have ever been entertained amongst ourselves, I shall not stop to say ; but for my own part, should like to be informed what *elementary* treatises *children* ever *do* understand, though they all terminate in certain knowledge ? Are the existence of God, and the distinction of good and evil, less *sure*, as principles, than the rudiments of arts and sciences : without some preoccupation of mind and memory, may not the judgment become as open to false as to true and just impressions ? at a riper age may not the *heart* be expected to interfere with the decisions of the *head* ? Can children be said to

understand grammar when they learn by rote the *first* lessons of classical instruction? Can they be said to *understand* the whole system of computation and numbers, algebra, geometry, &c. while they are learning their multiplication table, and the first rules of vulgar arithmetic at school? If indeed there were *many different roads* to the attainment of classical knowledge, or of arithmetic, algebra, geometry, &c., I would admit that there might be hazard of *confusion*, but not owing to any *want of understanding in the children*, but to the want of unanimity amongst the teachers. This is the real stumbling-block, and an *established* religion for the behoof of the *population at large* the most obvious remedy. I do not mean that we are to look for an infallible judge upon earth, to stifle *all* controversies by his mere *dictum*, or by rigid punishment of the most conscientious differences; but that a public standard should be always extant, to which the ignorant may resort; a standard founded on a truly *honest* and *sincere* interpretation of the word of God, by persons *selected* for their wisdom and learning, and particular competency. The consequence of waiting for the *acquiescence* of every man's private judgment, may clearly be seen, in communities, exempt from the *infallible authority* and assumed power of the Roman Pontiff. It will be said, confusion is better than tyranny. It may be so; but if confusion be the only alternative of the want of an establishment, what can be said against an establishment which is *not* tyrannical, which only professes to have done its best to provide for the instruction of the people at large, but not on any such principle of a *delegated infallibility*, as should give a right to coerce the conscience, or

force its *proffered* help and instruction, on those who should appear *resolved* to turn away from it?

But to return from what is not at this time so unreasonable a digression as might be supposed. As far as the two schemes I have mentioned were concerned, M. De Luc appears from his letter, to have so far succeeded in opening the king's eyes to the mischievous consequences that might ensue, as to procure them to be abandoned: and as the same monarch is still reigning over the kingdom of Prussia, it is certainly remarkable that we should so lately have learned from the report of *M. Victor Cousin*¹ to the French government, that under a law of 1819, religion is at this time made the very basis of *Prussian* education, being a leading article of instruction in their *lowest* or *primary* schools for *children*. [See his *Rapport sur L'Etat de L'Instruction publique dans quelques Pays de l'Allemagne et particulièrement en Prusse*. Paris, 1833.] Many of his statements upon this head are very interesting. In his first letter to M. Le Comte de Montalivet, (Ministre de l'instruction publique et des cultes,) he appears to regard it as a settled principle, that religion should be made the basis of public instruction. "Les Saintes Ecritures, avec l'histoire biblique qui les explique, et le catéchisme qui les résume, doivent faire la bibliothèque de l'*enfance*, et des écoles *primaires*." And in the second section of his account of the public instruction established in Prussia, particularly of the école primaire, I find the following passage.

"La principale mission de toute école, dit la loi de

¹ Cousin, 191, 192.

1819, est d'élever la jeunesse de manière à faire naître en elle, avec la connoissance des rapports de l'homme avec Dieu, la force et le desir de regler sa vie selon l'esprit et les principes du Christianisme. De bonne heure l'école formera les enfans à la piété, et pour cela elle cherchera à seconder et à compléter les premières instructions de la famille. Ainsi partout les travaux de la journée commenceront et finiront par une courte prière et de pieuses réflexions, que le maître saura ménager de telle sorte que cet exercice moral ne dégénère jamais en une affaire d'habitude. Les maîtres veilleront en outre à ce que les enfans assistent exactement au service de l'église les dimanches et fêtes."

As a surviving friend of *De Luc*, I feel sure that a good natured public will forgive my feeling interested in such a statement as the above, when not only his system of geology, but his religious principles, have been called in question; it is in truth, not at all improbable, but that he may have been the cause of checking the course of infidelity, at a most seasonable moment in the countries M. Cousin visited. I shall add the following account of the very first "objets d'enseignement," that appear in the "Plan fondamental des études à l'école normale primaire de Potsdam."

	Hiver.	Leçons.	Eté.
1. Religion.	Introduction à la Bible et à l'histoire biblique. Ancien Testament. Lecture et explication de la Bible.	4	Nouveau Testament. Lecture et explication de la Bible. Aperçu de l'histoire Ecclesiastique et de la religion Chrétienne.

Speaking of the provincial and village schools, M. Cousin writes, "L'objet principal et le fond de toute instruction est la religion, d'après l'histoire et la

Bible. Les livres principaux sont la Bible, le Psautier, le catéchisme."

But M. de Luc had more to do with the geologists, and with those who through them were preparing to adopt as a maxim, the very false notion that history had nothing to do with religion, and was in fact *no part* of it.

"The strength of the aggressors," he writes, "consisted in their representation of *Genesis*, which having reduced to an ancient mythology, and thus setting aside all revelation, no *positive* religion could exist, and though they pretended to derive that conclusion, from their knowledge of *Oriental* languages¹, they relied for their support on the pretended results of

¹ I may, perhaps, be indulged with one more *recollection*. I perfectly remember, that on descending from the University pulpit, after the delivery of my *third* Bampton Lecture, in which I had noticed the memorial of the Prussian Jews, I was met by my friend Dr. Ford, Principal of Magdalen Hall, the Lord Almoner's Reader in Arabic, and a consummate *Orientalist*. He asked me to accompany him home, that he might show me many letters he had received upon the subject, immediately from Prussia. I did so, and was shown some in German, some in Latin, and some in French. He allowed me to take extracts from them; but as more than twenty-eight years have passed over my head since, it will not be wondered, that I now know not where to look for them. I can only bear my testimony to the concern and surprise expressed by the Professor, at the folly of such proceedings. And that he was aware as well as M. De Luc and myself, that there were persons at that time in existence, and in prominent situations, quite capable, "by arguments drawn from Physics, of invalidating Scripture truths," contrary to Mr. Lyell's supposition, (Vol. i. 68.) who has shown himself, in the place referred to, too much inclined to sneer at those *weak* persons, who could "take such things for granted," on De Luc's authority!—And yet upon this authority, I am able to relate the following fact. Being in company with several wavering and incredulous Jews, among whom De Luc was arguing in defence of revelation, one happened to enter of more steady faith and principles than the rest of the company, when the following greeting took place,—“Venez, Rabin! venez! voici un Naturaliste qui vous fera bien plaisir; il veut prouver que MOÏSE étoit un *Envoyé* de Dieu.”

the study of the earth. Thus the Jews who had addressed Dr. T. gave as a motive to abandon the Mosaic history, "that the description of the world in Genesis was so different from what the *study of nature had shown*, that no men of knowledge could continue to believe the inspiration of that book."

It seems the mythological interpretation of the book of Genesis was called, "*la nouvelle exegèse*," being a *new mode* of explaining the Bible, so as to efface all ideas of the direct inspiration of the authors. "It is the same system," says M. de Luc, "that Dr. Geddes, evidently connected with that sect, had attempted to introduce into England by means of his translation of the Bible. An undertaking, however, which the *good spirit* of the *English* nation disconcerted."¹

"It is a great illusion to fancy, that the *religion of Christ* is independent of an inquiry into the character of *Genesis*. Christianity takes its origin in the *fall of man*, and the *promise* of a *Redeemer*. If *Genesis*, therefore, can be shown to be a fable, those who attack it know but too well that Christianity will fall with it. The origin of the indifference shown to the latter in most of the states of Germany is, to my certain knowledge, the attack upon *Genesis* through *Geology*!"

I do not choose to omit the following passage, as it may serve to show, that in the little judgment I

¹ The credit here given to the English nation, however just, in 1807, appears to have been but slowly acquired. I have among my papers, a letter, dated July 8th, 1794, in which he expresses his concern, that the first vol. of Dr. Geddes' Bible should have been allowed to circulate for two years ("*faire chemin*," is his expression) without notice on the part of our divines. But he takes courage from an article just then begun in the British Critic, and which I have reason to know, was in a great measure from the pen of Bishop Horsley.

had to exercise upon such a subject, I took leave to differ from my worthy correspondent on some points, since then become of considerable importance.

“It appears that Mr. Playfair’s *Illustrations of the Huttonian Theory of the Earth* have made such an impression on you, that they have created more than doubt in your mind on some essential points of the system exposed in my Letters to Professor *Blumenbach*, which you have translated.”

Then follow, of course, many remarks upon the Huttonian System, which however ingenious, it would be unseasonable at present to repeat¹. It might look as if I had at that time fancied myself to be as competent a judge, and as proper a referee on such points, as the partiality and good opinion of the worthy writer, induced him to think. To say the truth, highly as I estimated his zeal in the cause, I had shown in other parts of my Lecture, that not all the geologists in the world would shake my faith in the book of Genesis, as a real history of our species, and certainly no mythos; besides there were some points, as shall be shown hereafter, in which I did, as far as my

¹ Having been for many years much out of the way of literary society, I know not how the following difficulty was ever got over—I see in Playfair, and even in Bakewell, and Herschel, that Sir James Hall’s experiments as to the principle of pressure, to modify the effects of heat, in confining the volatile parts of bodies, were applied by Hutton, to substances heated at the bottom of the *sea*, and under the resistance of a column of *water*, of 1500 feet, or more.—M. De Luc in his Letter, foretells a failure in this part of the Huttonian theory, “When it comes to be *considered*, that the pressure exercised at the bottom of the ocean, is not that of a *solid*, as in Sir James Hall’s *experiments*, but of a *liquid*, which all the permanent *expansible fluids* penetrate as soon as formed;” and he appeals to navigators for the effect of the decomposition of vegetables and animals, under water, by the rising of bubbles of air to the surface.

judgment could carry me, most cordially agree with my venerable friend; and am disposed to do so still. One sentence I cannot bring myself to pass over, as it is characteristic of the indefatigable zeal of this aged philosopher. Being desirous of refuting some facts on which he thought Playfair had placed too great reliance, he writes :—

“ With that view, though in my 80th year, and coming out of a severe illness, having pleased God to restore sufficiently my health, I set out *last year*, at the end of June, for new observations¹.—Since then, I am much altered, and my bodily strength is almost entirely gone.” His mind however continued at work, since it was employed at the time of writing his letter to me, in confirming by *experiments*, certain facts, insisted upon in two of his works, published in France from Berlin, under the titles of “ *Introduction à la Physique Terrestre par les Fluides Expansibles*,” and “ *Traité Elementaire sur le Fluide Electrico-galvanique*.”

The remainder of his letter, which occupies thirty-one very closely written pages, and is very methodically divided into as many as five and forty sections, is devoted to the correction of some opinions which he thought I had too hastily imbibed from the perusal of *Playfair's Illustrations*², but any reference to such

¹ Upon this occasion, I know that the houses of all the gentry in the countries he passed through, were open to him, and many lovers of science accompanied him during his researches.

² It was not the perusal of Playfair's *Illustrations* only, that had led me to entertain more enlarged ideas of the operations of fire, at the time of my preaching my Bampton Lecture; I had acquaintance with many persons inclined to the Plutonian system, or system of the Vulcanists, and I wished to do justice, at least, to both, or afford scope for the blending of the two systems, as appeared to me most reasonable.

opinions, at present, whether right or wrong, is quite unnecessary. I shall have occasion to make some allusion to them elsewhere, when I hope to do M. *De Luc* so much justice as to show, that some of the most eminent naturalists and geologists of the day, have either adopted his conclusions, or been conducted to the same, by their own researches.

Having for a great number of years been engaged in studies, business, and pursuits, wholly incompatible with the roving life of a practical geologist, I hope it will not be thought that I have wilfully, or ungratefully turned away from a branch of knowledge, in which he thought I might obtain a greater proficiency

Among the persons alluded to, I hope I shall be excused mentioning my maternal uncle, Mr. Strange, F.R.S., (only son of Sir John Strange, Master of the Rolls,) his Majesty's resident Minister at Venice, for many years. In the fourteenth note to Playfair's Illustrations, Mr. Strange has the credit given him, of being the first to discriminate the *different* effects of fire, in the production of rocks, acting in various situations, and under different circumstances. Mr. Strange's account of two Giants' Causeways in the Venetian state, descriptive of these things, is to be found in the 65th volume of the Philosophical Transactions, of which I have a copy in my possession, corrected and much enlarged by himself. In Stock's Life of Dr. Beddoes, this paper is also particularly noticed. Mr. Strange was a member of almost all the Philosophical Societies abroad, and a great collector. He died in the year 1798, leaving (besides a great collection of minerals, coins, pictures, &c.) a library of upwards of 80,000 volumes; the catalogue of which, in two volumes, under the title of *Bibliotheca Strangeiana*, and which, as one of his executors, I caused to be made with great care, is still well known to the curious in books. Having had occasion to speak in another place of the heedless manner in which *some* geologists form their conclusions, I cannot forbear adding the following passage from *Playfair*, in commendation of the contrary proceedings on the part of my respected relative.—“ Mr. Strange's paper affords a specimen of what is, perhaps, rare in any of the sciences, and certainly most rare of all in geology, viz. a philosophic induction carried just as far as the *facts* will bear him out, and *not a single stage beyond that point.*” Illustrations, p. 265.

than has turned out to be the case, if I copy the last sentences of this very curious Letter.

“ I have now accomplished what I had long in mind to execute for you—after which you will not doubt of my sincere and affectionate regard. I am now old and infirm: I have prepared the *arms*, but shall not be long able to *fight* with them. It would be therefore a great consolation for me, before I leave this world, to see *you* remain in the field with those *new* arms.—

“ Yours ever, Dear Sir,

“ DE LUC.”

Perhaps, I should not have neglected those *new* arms, as he calls them, so much as I have done, if I had not entertained a much greater confidence, as has been before observed, in the old, tried, and highly tempered arms of pure theology, and uncontradicted Bible History.

Not that I could ever be indifferent to any geological testimonials in support of what it has been usual to call the Mosaic Cosmogony, but I have always felt that I could do without them, in which some living observers of great name appear to have agreed with me. I hope I may be allowed to copy a few passages to this effect from my Bampton Lecture, Sermon VI. premising only, that in the same Sermon I had previously shown, how consistently with the *attributes* of God, the *beginning* of things here *might* have been as Moses describes. The following passage was then introduced as a caution *by anticipation*, as it would now seem, against any *supposed geological appearances* to the contrary, by which unphilosophical persons are, to my certain knowledge, constantly liable to be

misled, and much more generally so, than geologists themselves seem willing to grant.

“That the fabric of this globe bespeaks an origin much anterior to the era assigned by Moses, depends on speculations, which however cautiously conducted, may never be allowed to disprove a fact capable of almost positive demonstration. That the *chief* use of this globe of earth is to be the abode of *man* cannot be doubted; the great and most material fact, therefore, to be decided, is, when did man first stand in need of this abode? It matters nothing to *us* what the world was previously; without such an inhabitant as man, it could be no more to *us* than what the wild and desolate and unfrequented parts of the earth are at this day: of which as it concerns no man to take notice, so need we not be solicitous as to such a state of the globe we dwell on. Surely our reason may be brought to assent to these three propositions; that in the beginning God created the mass of which it consists; that it was, previously to the introduction of our great progenitor, ‘without form and void,’ whether in its first original state, or as some writers have supposed, by the dissolution of a former state; and that it was reduced to the order in which we now see it, for the especial purposes of our race, by the immediate decree of God’s providence. In precisely what manner the strata became so arranged as we see them; what time was necessary for the formation of such depositions from a watery fluid or such concretions from an igneous one, as we now behold, it may be *amusing* to calculate: but it can be of no use or certainty: of no certainty, for the reasons already stated; of no use, because should the mere matter of this globe even be proved to have subsisted for ages and ages

before the creation of Adam, and to have undergone numberless revolutions, I *know not* that it could be of any concern to *our* race. We date our title to the possession of it, and dominion over it from Adam; and have no need to ascend higher. I say from Adam, not only because we are told so in the first chapters of Genesis, but because our Saviour and St. Paul have also insisted upon it."

Such were my sentiments upon these points, preached, printed and published eight and twenty years ago. Some years indeed *before* the appearance of my Bampton Lecture, I had said as much in my book on the Plurality of Worlds, where I find this passage:—"With the creation of the material substance of the earth, we have really no concern; except to refer it, as all theists must do, to an intelligent First Cause. The beginning of the *human race*, and the history of our progenitors, including particularly the origin of evil, and the knowledge they had of the Creator and his laws, are all with which *we* have to do. If the substance of the earth were, for ages previous to its present form, a chaotic mass, as some think: or immersed in the body of the sun, as others have supposed; or wandering as a comet; or scintillating as a fixed star; or even, according to another conceit, if it were, long before the existence of mankind, inhabited by *angels*; in all these cases it could not be at all related to us;—till our own species had possession of it, as we see at this day, it was no more to *us* than at present any one of the invisible satellites of the most remote orb above."—ΕΙΣ ΘΕΟΣ, ΕΙΣ ΜΕΣΙΤΗΣ, pp. 113, 114. Such, I say, were my sentiments *very long ago*; long indeed before comparative anatomy had stepped in to give us the

information of which so much has been made ; nor have my opinions varied since, nor are they likely to do so, unless the geologists of the day, those at least most in vogue, can tell us more (that is more of absolute certainty) than they do at present of the condition of this planet, before the introduction of the human species. What can it be to *us* in any religious, moral, or metaphysical point of view, to know, that the planet was for a long time, to all appearance, in the possession of nothing better than a race of marine animals ; that at another time it was in the possession of a parcel of amphibious monsters, Icthyosaurs, Plesiosaurs, and the rest of the *Saurian* tribe ; to say nothing of the Pterodactyls, Anoplotheriums, Palæotheriums, &c., &c., &c. Of what use is it to *us* to be told that we are living upon a decaying earth, hourly descending into the bosom of the great deep, there to form new earths and new continents ; with this great difference, indeed, that whereas we have inherited from those who went before us so little assistance, as to have been obliged to invent all the arts and sciences, with which we are acquainted, *we* are, by losses at sea and river drainage, continually conveying to the world preparing for those who are to *come after us*, a vast abundance of imperishable things, ready *manufactured*, according to the nicest principles of those very arts *we* have had the trouble of inventing. Of such contributions to the behoof of the inhabitants of the next set of continents, we have, in fact, almost a regular *catalogue*, prepared by no less a person than Mr. Lyell, in his very entertaining Lectures at the King's College.

“ When we reflect,” says he, “ on the number of curious monuments consigned to the bed of the ocean

in the course of every naval war from the earliest times, our conceptions are greatly raised respecting the multitudes of *lasting* memorials which man is leaving of his labours. During our last great struggle with France, thirty-two of our ships of the line went to the bottom in the space of twenty-two years, besides seven fifty guns ships, eighty-six frigates, and a multitude of smaller vessels. The navies of the other European powers, France, Holland, Spain, and Denmark, were almost annihilated during the same period, so that the aggregate of their losses must have many times exceeded that of Great Britain. In every one of these ships were batteries of cannon constructed of iron and brass, whereof a great number had the *dates* and *places* of their *manufacture* inscribed upon them in *letters cast in metal*; in each there were coins of *copper*, *silver*, and often many of *gold*, capable of serving as *valuable historical monuments*; in each were an infinite variety of instruments of the arts of war and peace, many formed of materials such as glass and earthenware, *capable of lasting for indefinite ages*, when once removed from the mechanical action of the waves, and buried under a mass of matter which may exclude the corroding action of the sea-water.

“ But the reader must not imagine that the fury of war is more conducive than the peaceful spirit of commercial enterprise to the accumulation of wrecked vessels in the bed of the sea. From an examination of Lloyd’s Lists, from the year 1793 to the commencement of 1829, it has appeared that the number of *British vessels* alone, lost during that period amounted, on an average, to no less than one and a half *daily*. Out of five hundred and fifty-one ships of the royal navy lost to the country during the period

above-mentioned, only one hundred and sixty were taken or destroyed by the enemy, the rest having either stranded or foundered, or having been burned accidentally. Millions of *dollars* and other *coins* have been sometimes submerged in a single ship, and on these, when they happen to be enveloped in a matrix capable of *protecting* them from chemical changes, much *information of historical interest* will remain inscribed, and *endure for periods as indefinite* as have the delicate markings of *zoophytes* or *lapidified plants* in some of the ancient secondary rocks. In almost every large ship, moreover, there are some *precious stones* set in *seals*, and often articles of use and ornament, composed of the *hardest substances* in nature, on which *letters* and various *images* are carved — *engravings* which they may retain when they are included in subaqueous strata, as long as a crystal preserves its natural form. It is probable that a greater number of monuments of the skill and industry of man, will in the course of ages be collected together, in the bed of the ocean, than will be seen at one time on the surface of the continents.”

Now, the bed of the ocean which is actually receiving all these things every day, nay every hour that passes, is we are told but the foundation of another habitable set of continents, navigable seas and rivers, &c. in a course of preparation, to succeed those on which we are at present carrying on our several businesses and occupations. How they are actually to change places at last, I cannot pretend to say; but have heard of an act of Parliament for the building of a new gaol not far from the place where I am writing, in which it was enacted, that the materials of the old gaol should be made use of in the construction

of the new gaol as far as ever they would go, *and*, that the prisoners already in custody, or to be committed afterwards, should be confined in the *old* gaol till the *new* one was quite completed. There *seems* to be some similarity in the two cases ; I use the term *seems* because I know that Dr. Hutton thought he had explained this ; but when I copy his words, I question whether they will be judged to be so satisfactory as one might wish.

“When this former land of the globe had been complete, so as to begin to waste and be impaired by the incroachment of the sea, the present land began to appear above the surface of the ocean. In this manner *we suppose* a due proportion to be always preserved of land and water upon the globe, for the purpose of a habitable world such as we possess, *we thus allow* time and *opportunity* for the translation of animals and plants to occupy the earth.” This is certainly better than the act of Parliament, but not much, and evidently only a theoretical contrivance. I conclude that Mr. Lyell thinks that all the drowned things he mentions as *imperishable*, are one time or other to come up to the surface again ; but, instead of any persons being able to acquire from thence any *valuable historical information*, I must say, not impertinently I hope, that I much doubt it ; for as the present continents crumble to pieces, and many of the things they contain, are to a certainty exceedingly perishable, it will be difficult surely to connect the imperishable things then to be discovered in a *fossil* state, with the perishable things lost by the destruction of preceding continents. What will our successors learn from the turning up of “millions of dollars,” with the effigies of one or more kings of

Spain upon them, when it must be supposed that before they will be discoverable, not only Spain will be gone, but all the histories of Spain; for it is not usual to write whole histories, upon adamant or rock crystal.

Much the same may be said surely of the “batteries of cannon, of iron, or brass, whereof a great number” may have “the dates and *places* of their manufacture inscribed upon them in letters cast in metal.” But what is this to the purpose? The places will be gone, and how to rectify or compare the *dates* of a *lost* world, I should be puzzled to say. If a very great abundance of the things in the *moon* should suddenly, or even gradually, come down upon this earth, though they should have many notes of *dates* and *places* upon them, surely they need bring some lunatic with them, to explain such things to us, who never lived in the moon.

But, after all, let our contributions to the continents now forming, or supposed to be forming at the bottom of the ocean be as many as they may, I do not see that they are to be a provision for more than one set of continents; and yet in the course of “countless unfathomable ages,” what a succession of such continents may there not have been, and passed away? and it seems to have been very oddly reserved for us *Adamites* to begin quite a new course of things. I have heard, indeed, and read of *pre-Adamites*—and why not, if the earth be now only passing through one of those changes to which it has been subject for millions and millions of years, or for an “infinity of time;” the only wonder is, that not one pre-Adamite, should have had any imperishable things to leave behind him, if it had been merely to prevent our be-

coming so conceited as to fancy ourselves to be the first rational occupiers of this earthly globe.

The Huttonian system, is a system of decay and renovation, but now we know there are some things not likely to *decay* during such transitions ; and others, which so far from requiring *renovation*, will turn up fully manufactured ; and if the places had not perished and the manufacturers with them, capable of directing our successors where to have more made, if they should come to want them.

It cannot be denied, that all the things which Mr. Lyell very justly represents to be continually carried, by different accidents, to the bottom of the sea, are according to the Huttonian system, to be expected to appear again, and probably to be sought after by the inhabitants of succeeding continents, as fossil *reliquiæ*. Now, the fossil *reliquiæ* of the continents *we* inhabit, are by this time pretty well known. But what a much more abundant harvest of curious *reliquiæ*, may our successors be in the way to reap than is the case with ourselves, who can not only *not* find any ready made articles, either of use or ornament, but not so much as the fossil bones of any *manufacturer* of such commodities. I will quote the editor of one of the Baron Cuvier's works to this effect—

“ We have now,” says he, “ to notice a fact connected with fossil osteology, of the most singular and striking kind. We find, as has been seen, quadrupeds of different genera, cetacea, birds, reptiles, fishes, insects, mollusca, and vegetables in a fossil state ; but to the present moment no human remains have been found, nor any traces of the *works* of man, in those particular formations, where these different organic fossils have been discovered.” What is meant

by this assertion is, that no human bones have been found in the regular strata of the surface of the globe. In turf bogs, alluvial beds, and ancient burying grounds, they are disinterred as abundantly as the bones of other living species; similar remains are found in the cliffs of rocks, and sometimes in caves where stalactite is accumulated upon them; and the stage of decomposition in which they are found, and other circumstances, prove the comparative recentness of their deposition; but not a fragment of human bone has been found in such situations as can lead us to suppose that our species was contemporary with the more ancient races. The Palæotheria, Anoplotheria, or even with the elephants and rhinoceroses of comparatively a later date.

“Many authors, indeed, have asserted that *debris* of the human species have been found among the fossils properly so called, but a careful examination of the facts, has proved that they were utterly mistaken¹.”

The same may be asserted of all articles of human fabrication; nothing of that description has ever been found indicating the existence of the human race at an era antecedent to the last general catastrophe of the globe, in those countries where the strata have been examined, and the fossil discoveries we are treating of been made. Yet there is nothing in the composition of human bones, that should prevent their being preserved as well as others; they are found in ancient fields of battle, equally well preserved with those of horses, whose bones, we know, are found abundantly in the fossil state.

¹ See the Discours Preliminaire to Cuvier's Ossemens Fossiles.

“The result then, of all of our investigations serves to prove, that the human race was not co-eval with the fossil genera and species, for no reason can be assigned why man should have escaped from the revolutions which destroyed those other beings, nor, if he did *not* escape, why his remains should not be found intermingled with theirs.

“It is not meant however to say, that man did not exist at all in the eras alluded to, he might have inhabited a limited portion of the earth, and begun to extend his race over the rest of its surface, after the terrible convulsions that had devastated it were passed away. His ancient country, however, remains as yet undiscovered. It may, for aught we know, lie buried, and his bones along with it, under the existing ocean, and but a remnant of his race have escaped to continue the human population of the globe¹.”

I shall conclude this part of my work with a passage from *Cuvier* himself, so consonant to what I have said elsewhere in support of the Mosaic history, as not reasonably to be passed over; if as the geologists of *Cuvier*’s own school insist, such a countless succession of mundane revolutions have passed, how could Moses without preternatural assistance, have ventured to speak of the race of man, as comparatively so recent an introduction? He is supposed by his *mythological* interpreters, to have only collected his materials from ancient traditions, and something as extravagantly fabulous, as the legendary tales of our old monkish writers; but the Baron *Cuvier*, writing of the Grecian antiquities, seems admirably

¹ Griffith’s edition of *Cuvier*’s *Animal Kingdom*.

to have concluded that traditionary evidence, even amongst the pagans, could ascend only to a certain point, let the body of the earth, or the planet itself in short, be as old as it may.

“ Thus, not only should we not be surprised to find, even in ancient times, many doubts, and contradictions respecting the Epochs of Cecrops, Deucalion, Cadmus, and Danaus; and not only would it be childish to attach the smallest importance to any opinion whatever, regarding the precise dates of Inachus or Ogyges; but *if any thing ought to surprise us*, it is *this*, that an *infinitely more remote antiquity* had not been assigned to *those personages*. It is impossible that there has not been in this case some effect of the influence of *received tradition*, from which the *inventors of fables* were not able to free themselves¹. ”

¹ Theory of the Earth. The time of *Inachus* has been variously represented to be about eighteen centuries before Christ, and that of *Ogyges* some years after.

PART IV.

THE Baron Cuvier, in the section of his theory of the earth, which professes to give an account of preceding systems of geology, observes that “during a long time, *two* events or *epochs* only, the *creation* and the *deluge*, were admitted as comprehending the changes which have been operated upon the globe; and all the efforts of geology were directed to account for the present existing state of things, by imagining a certain original state, afterwards modified by the deluge, of which also, as to its causes, its operations, and its effects, each entertained his own theory.”

This is all exceedingly true; nor would it be difficult to enumerate and classify the several investigations, to which the efforts of geology have subsequently been applied, in order to account for (if possible) the changes which “have been operated upon the globe.” We know how much *light* has been supposed to have been thrown upon the subject of late years, by the Baron’s own pursuit of the science of comparative anatomy; if light indeed, it may be called, for except as a fresh proof that the sea has changed its bed, I do not know that it has yet done much more than enable us to detect the existence, and destruction of many strange animals, in very strange places, and under very strange circumstances, thereby rather affording room for an

increased variety of conjectures, than enabling us to draw any *indisputable* conclusions, beyond the facts themselves. The discoveries as far as they go, are unquestionably very *curious*, and very interesting, particularly to the skilful in comparative anatomy, enabled from a few detached fossil bones, to build up a complete animal which nobody living ever saw, and it is to be hoped never will; still certainly upon principles truly scientific. The general utility of such discoveries is not clear; their importance however, may not I suppose be questioned, after such a statement as follows. “The inquiries of the immortal Cuvier, into the remains of the organic creations of *past successive ages* have been of the greatest use to geology; and the science is indebted to him for first drawing attention to this *essential* study. A train of physical events has been made out included in many *myriads of ages*, whence we have obtained a *better* notion of the *antiquity* of the earth than before, as well as of the *immensity* of time, *beyond what figures are capable of affording*, whereby we trace back events far beyond the periods of written history.” *If* this be essential to geology, and geology essential to the happiness and well being of man, not only here, but hereafter, its importance must be great indeed.

Other sciences besides comparative anatomy, have been at the same time in such a state of rapid advancement, that there is scarcely any saying what may not come, in time, to be new and important objects of *geological* inquiry. To take Mr. Lyell’s own enumeration of the sciences already connected with geology. The geologist, he tells us, should be well versed in chemistry, natural philosophy, mineralogy, zoology, comparative anatomy, botany; in short in every science

relating to organic or inorganic nature. In such a work as the present, however, we can only revert to the two original events, and epochs, alluded to, the *creation* and *deluge*, as connected with the changes operated upon the globe. Moses is the only accredited historian of both events; and Moses certainly existed and wrote, long before any geological examination of the earth had been attempted.

I have always thought that it amounts to no small proof of the credibility of the Mosaic history of the creation, that the author writes with a prudence and caution very little to be expected of a cosmogonist of so remote a period. In fact he writes of the creation *historically*, and not *philosophically*; his first four annunciations being *simply*, that “in the beginning God created the heavens and the earth; that the earth was without form and void; that darkness was upon the face of the deep; and, that God said let there be light, and there was light.”

As *historical* facts, it is impossible that any person can contradict these assertions. They may be denied, but they cannot be contradicted; but what ancient philosopher could now obtain credit for his *philosophical* mode of building up a world, by a fortuitous concourse or jumble of atoms; by fanciful combinations of the dry and the humid, the hot and the cold; by the prolific virtues of the sun, eliciting living creatures from a viviparous slime? What credit do we now give to the philosophical reveries of the very persons whom Cuvier himself mentions, Burnet, Woodward, Scheuchzer, Whiston, Leibnitz, Demaillet, Buffon, Kepler, De Lamarck, Patrin, Oken, Steffens, Delametherie, Lamanon, MM. de Marschall, Bertrand, &c. &c.

I will venture to say that no *philosophical* account of the beginning of things *here*, or of the changes that the earth has undergone, has ever yet acquired so great credit, as the *historical* relation of Moses, principally on *this* account, that he wrote *historically* of things that we must be contented, in a very great degree, to take upon trust. No man saw the creation¹; and I may surely venture to say, that no man has ever seen the complete crumbling to pieces of former continents by the action of rivers and other causes at this moment in operation; no man has ever witnessed the scooping out of existing valleys, and the conveyance of their materials to the bottom of the ocean, there to be baked and consolidated under an enormous pressure, and formed into strata for future continents at some period in the lapse of “countless ages;” no geologist, I say, not Dr. Hutton, not Mr. Playfair, not Mr. Lyell, ever saw these things fully operated; in every case we are expected to take much upon trust, as though God could not possibly have produced what we see, otherwise than they conceive. Mr. Penn, fairly

¹ Hoc animi demum *Ratio* discernere debet,
Nec possunt oculi naturam noscere rerum.

Reason alone this question can invade,
Eyes cannot see how nature's frame was made.

These lines would be admirable if *reason* could actually supply the loss or want of *vision*; but *this* we know, that in abundance of cases, it *cannot* do. Nothing can be more vain or presumptuous than to fancy that the *human reason* can penetrate the thick darkness with which the *invisibilia* of the commencement and end of things, is at present covered. There is one sense indeed in which “the invisible things of God” may be said to be “clearly seen, even his eternal power and Godhead,” *Rom. i. 20.*; but as to what the Almighty, in virtue of these exalted attributes, actually *has* done, or finally *will* do for us, we must be content, for the present, to “walk by faith not by sight,” by faith, *not reason*; though assuredly yet by a reasonable faith.

enough, I think, writes to the same effect of Mr. Humboldt's principle of *development*. "If our great geognost should affirm that in thus asserting *internal development*, he speaks of *positive facts*, and not by *hypothesis* (Mr. H's avowed intention) I shall request him to direct me to the *fact*, of a rock in *actual course of development from an amorphous to a perfectly crystallized state*," vol. i. 335.

It has been admirably observed, that "the original instantaneous production of vegetables, birds, &c., &c., has never been made such a stumbling-block by the botanist or zoologist, as the first arrangement of the mineral strata has been by the geologist. No botanist or zoologist of sane reputation, inculcates that plants and animals acquired their perfect and unvarying forms, through successive organic depositions of *wood* or *bone*, in some primordial chaos of vitality¹."

But this remark has been carried further by Mr. Granville Penn, in his theory of *first formations*; and though it seems to be regarded as little less than a capital unpardonable offence against modern science to place any confidence in his geological reasonings and conclusions, if I may be permitted to call them² such, yet I defy any pious, sober-minded Christian to read his work without feeling an *inclination* to agree with him upon several important points.

I know that in referring to this writer, I am in some degree denouncing the system of De Luc, in which I have professed to have taken, a great, though not an unqualified interest, in time past (for Mr. Penn rejects all ideas of crystallization or chemical

¹ Professor Ure's New System of Geology. London. 1829. pp. 81, 82.

² A Comparative Estimate of the Mineral and Mosaical Geologies.

precipitations, in the formation of granite, &c.), yet I see not why these two authors should be held to differ so much as Mr. Penn apprehends. The only question between them, being in *fact*, when did God by his *fiat* place things in such a situation, as to be thenceforth carried on by secondary causes. Mr. Penn thinks granite was as much a *first formation* for the support of man's *habitation*, as *bones* were for the support of his *person*; M. de Luc thinks granite was formed *chemically* upon the introduction of *light*: in both cases we discern a very just and pious acknowledgment of the great *First Cause*, and a cordial agreement as to the reception of the *Mosaic epoch*. Nor do I see why M. de Luc should be accused, so much as Mr. Penn does accuse him, of offending against the laws of *Newton*; he seems as much to depend upon having discovered the most *general cause* of all visible things as Mr. Penn, though, indeed, he may appear to some to proceed from that cause in the way of *synthesis*, rather than having first worked his way back to it by analysis, to take it up synthetically from that point; but it was not really so: it would seem that *one small letter* would almost have reconciled Mr. Penn to M. de Luc's principle. For after citing the following passage from one of his geological letters, "*La géologie est principalement distincte de l'histoire naturelle, en ce que celle-ci se borne à la description et classification des phénomènes que présente notre globe dans les TROIS règnes; au lieu que la première doit lier ces phénomènes avec leurs causes,*" he adds, we should rather have expected that such a writer would have said, "*avec leur cause.*" Now, I will venture to say M. de Luc meant to say so: regarding *light* as a principle, *wanting*, and only

to be supplied by that most sublime *fiat* of the Almighty, which has excited the admiration of all ages, and justly obtained for the author of the Book of Genesis, a place in the celebrated treatise of that eminent philosopher and critic of antiquity, *Longinus*. In fact, M. de Luc's appropriation of *light* in this case is precisely similar to Newton's appropriation of the principle of *gravitation* which Mr. Penn so much admires, Part I. chap. IX. "When Newton," he says, "ascribed the phenomena of our planetary system to a common secondary cause, he referred that secondary cause immediately to the primary causation of the *divine will and power*, as the primary principle without which it would be inoperative and barren of all phenomena." I can perceive no difference in the two cases. The chaos of De Luc would then only deserve to be compared with the atomical system of Epicurus, when it should be set to work fortuitously, and without the intervention of an all-wise and all-controlling Providence. Mr. Penn is, I think, in like manner too severe upon De Luc for his delicacy about the term *created*. If creation must imply absolute perfection, independent of all subsequent modifications, much of the very short account in Genesis would have been superfluous, especially Gen. i. v. 9, on which Mr. Penn lays great stress, for surely the distinction of sea and land might by creation as well have constituted part of a first formation, as been produced by violent disruption of the solid surface of the earth, on which Mr. Penn insists, and whose ideas upon this head, seem as opposite to instantaneous *perfect* creation, as any processes of chaotic precipitation and crystallization.—See Comparative Estimate, Part II. chap. V.

Having observed that Moses writes historically rather than philosophically, his office being to record only the *act* of creation, not the *mode of it*, to tell us that God made the world, not *how* he made it, I ought, perhaps, to say, that Mr. Lyell refers to history, for a confirmation of the *Huttonian* theory of a succession of decays and renovations; but the history to which he appeals, though supported by a great display of learning, is certainly very different from the Mosaic history in point of credit. The Institutes of Menu—the Hymns of Orpheus, Cassander, Pythagoras, Ovid (*Metam.* XV.), Aristotle, Strabo, &c.

If we should grant that all these authors concur in giving countenance to the opinion of the immense antiquity of the globe, and of the powers of nature in successively destroying and renovating our continents, and their various inhabitants, still we may rely upon it, that *our own history* is altogether *Mosaic*; we can go back regularly to Adam, but not a step beyond. And it must, I think, be admitted by all parties to be exceedingly remarkable, that the *unphilosophical* historian of our race, should have described things so much in conformity with the discoveries of modern geologists, as to make man the last of all created living beings; and of *recent* introduction, if the world be as old as they pretend.

“It is possible,” says an able journalist, “that *even yet* there may be some among our readers who will be startled by the *assurance* that *no doubt can be entertained*, from the evidence of organic fossils alone, exclusive of other cumulative proofs from the igneous and stratified rocks, that *before the creation* of any of the existing species of animals, of which man seems to be the most recent, the earth had been inhabited

by innumerable other species and other genera, successively created and extinguished during a lapse of time wholly unmeasurable, but which *must* have comprehended *millions of ages rather than of years.*"

It is the sole object of this treatise to prevent persons being *so* startled at such geological *assurances*, as to be turned aside, by any perplexities as to the history of the *earth*, from the much more direct and indisputable evidence we have in our hands, of the history of *man*.

But in the passage just cited, there are some expressions, very puzzling to those who are *not* geologists, I should, perhaps, rather have said, very "*startling*;" what are we to conclude from the words "even yet," but that the Huttonian theory has something in it so indisputably convincing, that it is quite astonishing, past conception indeed, that there should be "even yet," persons, blind or perverse or obstinate enough to doubt that the *very continents on which we dwell*, to say nothing of anterior ones, are of an *immense* age; an age to be measured, for instance, by the time necessary for the scooping out of all our valleys, (in mountainous districts particularly), by *existing* causes.

But it happens to be exceedingly well known, that opinions very different from the above, concerning the age of our *continents* have been entertained and publicly avowed by naturalists of so great name, that it is impossible entirely to pass them over, especially as the opinions to which I allude, have been judged to be decisive of a very remarkable epoch in the history of the earth as well as of man; and though it is my wish still, to confine my own observations as much as

possible to the history of MAN, I must say I am one of those who do *not* see "*even yet*," that the Huttonians, (or Lyellians, who on some points differ from the former), are the only persons in possession of the true history of the *earth*.

It is very easy to say, as Dr. Hutton himself *did* say, that geology is in no ways concerned with "questions concerning the origin of things," an opinion which Mr. Lyell thinks will ultimately and universally prevail; but if this be so, why should we bestow so much time, as professed geologists are known to do, in investigating a succession of changes, which if they do not carry us back to the actual origin of things, seem uselessly to carry us far back beyond the era of *our own origin*. There may be great want of taste, but surely no unpardonable contempt of science properly so called, in not being capable of fully appreciating the exalted feelings of a *conchologist* under some, at least, of the following circumstances.

"A fossil shell may interest a conchologist, though he be ignorant of the locality from which it came; but it will be of more value when he learns with what other species it was associated, whether they were marine or fresh water; whether the strata containing them were at a certain elevation above the sea, and what relative position in regard to other groups of strata, with many other particulars determinable by an experienced geologist alone. On the other hand, the skill of the comparative anatomist and conchologist are often indispensable to those engaged in geological research, although it will rarely happen, that the geologist will himself combine these different qualifications in his own person."—Lyell i. 3.

It is certainly quite true that many sound believers, being geologists, have strongly expressed their own feelings upon the subject, to be as much as ever in favour of the divine authority of the sacred records; and God forbid that I should be disposed to doubt it, but this is, I believe, in a great measure confined to the geologists of our own country; on the continent it has long been known to be different; and it is chiefly to prevent *contagion* from such examples that these “cautionary remarks” have been put together. If geologists are for discharging their favourite science from all connection with the Bible history of the beginning of things, it is but fit that the Bible should be more than ever secured and protected, from all improper interference, on the part of the geologists; and that this has not been duly attended to in some parts of the continent, may be seen by the extracts I have introduced from M. de Luc’s MS. Letter, both Jews and Christians in the kingdom of Prussia, having been induced (it matters not how long ago), expressly in consequence of what geology had been supposed to have brought to light¹, to give up the Book of *Genesis*, as a mere *mythological* invention.

But if *Genesis* be no better than a fable, it deserves to be considered what is the amount of positive information we *lose* thereby; that is, of information nowhere else to be acquired, though of infinite importance. If *Genesis* be a fable, then we know nothing certain, first, of the mode by which evil was introduced into this portion of the universe; secondly, of the real and proper cause of man’s mortality; and

¹ See from Rosenmüller, Penn, i. 193.

thirdly, of the remedy for both to be accomplished through Christianity, as shown by St. Paul in his Epistle to the Corinthians, on which I have said so much in other parts of this work. I am far from wishing to speak slightly or disrespectfully, of researches, so curious, so amusing, and often, indeed, so hazardous and laborious, as those of professed geologists; but let any serious, thoughtful person compare the three articles of information I have just mentioned, with all that can possibly be learned from geology alone, and I will venture to say, the latter will appear so exceedingly inferior, as not to merit a thought where anything like competition occurs, between the physical geological *appearances* of the earth, and the grave, sober, and in short *sacred history* of its *rational* inhabitants. For my own part I am very much disposed to think that some most eminent geologists have occasionally suffered remarks to flow from their pens, without sufficient consideration of the impressions they *may* make on unsettled minds. I find even Cuvier rather unguardedly referring to the “*physical history of the globe*, as the foundation of mineralogy, geography, and even, it may be said, of the history of *man*, and of all that it most concerns him to know with regard to himself.” Surely the latter sentence is too unguarded.

It may be, that “the decay and renovation system,” so prevalent, and so countenanced at present, is very much in accordance with what is to be found in certain ancient writings; but it is surely too much to say, as it has been said, that the “*most ancient historical records* all ascribe the origin of the earth to a supreme Being, of eternal existence, omnipotent in

power, and *occasionally destroying and reproducing the globe and its inhabitants*. Such was the doctrine of the *Hindoos* 880 years prior to the birth of Christ¹."

It is impossible to resist laying claim to a higher antiquity on behalf of Moses, not of a few years, but of as many as 652 at the least, the five books of Moses having been written as many as 1452 years B. C. according to some of our most respectable tables of chronology. The *Hindoos* (or *Hindus*) seem to be authorities of great weight with modern geologists; Mr. Lyell begins his very curious work with a reference to the *Institutes of Menu*, as has been before observed. Now it is certainly somewhat curious to see how much more magnificently Moses could write of that "supreme Being, of eternal existence," &c., who made the world, than the *Hindoos* could write, six centuries and a half afterwards. The following is Moses' account of the hebdomadal production of the globe we inhabit.

"Thus the heavens and the earth were finished, and all the host of them.

"And on the seventh day God ended his work which he had made: and he rested on the seventh day from all his work that he had made.

"And God *blessed* the seventh day, and *sanctified* it; because that in it, he had rested from all his work which God created and made."

Some persons I know have objected to the word *rest* as applied to the Deity; but, besides that it could not well mean any thing betokening fatigue, and was probably used only as emblematical of that rest enjoined to man in the *sanctification* of the Sabbath, let us see

¹ Discoveries of Modern Geologists, No. III. in Fraser's Magazine, No. XXXIII.

how much rest and repose, nay slumbering and sleeping, the Hindoos attributed to the Being employed in destroying and renovating this globe and its inhabitants.

“The Being whose powers are incomprehensible, having created me (Menu) and this universe, again became absorbed in the supreme spirit, changing the time of energy for the hour of repose.

“When that power *awakes*, then has this world its full expansion: but when he *slumbers* with a tranquil spirit, then the whole system fades away. For while he reposes, as it were, embodied spirits endowed with principles of action, depart from their several acts, and the mind itself becomes inert.”

Menu then describes the absorption of all beings into the Supreme Essence, and the *divine soul* itself is said to *slumber*, and to remain for a time immersed in “the first idea, or in *darkness*.” He then proceeds (verse 57), “Thus that immutable power by waking and reposing alternately, revivifies and destroys, in eternal succession, this whole assemblage of locomotive and immoveable creatures.”

It is next declared, that there has been a long succession of *manwantaras*, or periods, each of the duration of many thousand ages, and there are creations also, and destructions of worlds innumerable. “The Being supremely exalted, performs all this with as much ease as if *in sport*, again and again for the sake of conferring happiness.”

Mr. Lyell has so much qualified his admission of the above into his book, as amounting to any actual record of history, much less of revelation, that I must not attempt to say more of it, than that it is utterly astonishing to my mind, that puerile as the one ac-

count is, the other, which is more than 600 years older should be so much grander, more intelligible, and more applicable to the visible condition of things.

For in the *Mosaic* history referred to, we have the origin of the *Sabbatical* institution ; a *memorial* of past times, surpassing *in my own estimation*, in value and importance, all else that has been transmitted to us from the remotest ages ; and which for many reasons, seems at this time not lightly to be passed over. By the Sabbath, as a *memorial*, we have it in our power, to ascend regularly from the day that is passing over our heads, if not to the creation, at the very least, to the delivery of the Decalogue on Mount Sinai in the desert. As a *memorial*, we have it to appeal to, as a direct proof of the *resurrection of Christ*, when in assertion of Christian liberty, and to clear the *Christian Sabbath* as it were, from all *Pharisaical* pollutions, the Hebdomadal arrangement underwent a change in commemoration of *that* great event ; and which has ever since been observed, with such a general consent and acquiescence, as to leave no doubt upon the subject. Nor was this change so destitute of propriety, or so unconnected with the *old* covenant, as has been supposed ; for though I must travel back into antiquity again for my authority, yet it is such good authority, so plain and intelligible, when obtained, that I cannot refrain from bringing it forward. It is as nearly as can be sixteen hundred years old, but not the worse for that ; it is in short the authority of Cyprian, a prelate learned, virtuous, firm, and constant, under persecution. He not only bears testimony to the adoption and propriety of a septenary Christian festival, but after observing that

the Jewish circumcision, being on the *eighth day*, contained a mystery fulfilled in Christ, goes on to say, "because the eighth day, that is, the first after the Sabbath, was to be the day on which our Lord should rise and quicken us, and give us the *spiritual circumcision*, this eighth day, that is, the first after the Sabbath, and the Lord's Day, preceded in the *image*, which image *ceased* when the truth supervened, and the spiritual circumcision was given to us." It has been well observed by Mr. Holden, in his learned work on the Sabbath, that the above being contained in a *Synodical Epistle*, may be held to express the testimony and opinion not of one father alone, but of many.

The Sabbath besides, as a heavenly institution, has all the proof in its favour that could be required, as well internal as external. The most direct external proof of its heavenly origin, is its admission into the Decalogue, which has now for ages been received as a collection of laws, more than figuratively written, with "the finger of God." That the institution itself is older than the actual delivery of the law, I collect from these two very simple circumstances; first, that instead of running, "Remember to keep holy the SEVENTH Day," it is, "Remember to keep holy the SABBATH Day;" which must imply that they had been already accustomed to keep holy such a festival as was known by that name; which is also much corroborated by the application of the word "*Remember.*" The question however still remaining of what age was the institution they were thus bidden to "*Remember;*" the reference to the works of creation would be proper in either case. Had it been "Remember to keep holy the *Seventh Day*," the reference to the creation

would explain the reason for hallowing that day, and making it the Sabbath; but in the other case it very naturally stands connected with the *Sabbath*, as a no less worthy object of *remembrance*. The passage, Deuteronomy v. 15. in constituting the Sabbath, the memorial also of the departure of the Israelites out of Egypt, seems to me only to make the case stronger; for had there not been an earlier reason for sanctifying the Seventh Day, the departure from Egypt would surely have made part of the commandment. In my own estimation, even the account we have in the sixteenth chapter of Exodus, of the gathering of the manna in the wilderness, which Paley fixed upon as the first institution of the Sabbath, is calculated to show that it was known before; for on the surprise expressed by the people at the double supply on the *sixth* day, Moses is represented as reminding them, that the morrow was the *rest* of the holy *Sabbath* unto the Lord; v. 23, and *on the morrow*, as the text runs, “Moses said, Eat that to-day; for to-day is a Sabbath unto the Lord, to-day ye shall not find it in the field; six days ye shall gather it, but on the *seventh* day, which *is* the Sabbath, in it there shall be none.” The 28th and the 29th verses also tend to show, that one of the commandments they had previously refused to keep, was the law of the Sabbath; to fix which more strongly on their minds, the sixth day’s double supply seems to have been intended. And this might even accord with the calculation of the learned Mede, who, to prove this to be the *first* institution of the Sabbath, has been at the pains to show that on the seventh day preceding, they had *journeyed* all the day, and needed therefore a miracle to bring them back to their senses.

I regard as another strong external proof of the

early institution of the Sabbath, the division of time into *weeks*, undoubtedly derived from the most remote antiquity.

The keeping up of the Sabbath, or rather perhaps the consecration of the seventh day by the Christians, when all of the law that was strictly ceremonial was to cease, and in so marked a manner as to make it commemorative of the "*new creation*," consummated by the death and resurrection of Christ, constitutes it, I think, as much a *moral* law, as any of the other nine. Obedience being at all events a moral obligation, and the commandment being very decisively admitted into the Christian code. I stop not to consider the strange objections that have been raised to the observance of Sunday, as though it were almost an *anti-christian delusion*, to venture upon any *distinction of days*; for that, "to a true Christian every day is a Sabbath, every place is a temple, and every action of life an act of devotion;" I look rather to the actual effects and bearings of such an institution, as amounting to nothing less than an internal proof of its divine original. If it *should* be so, that to every *true Christian*, every day is a Sabbath, every place a temple, every act an act of devotion, what effect can this have upon those who are *not yet true Christians*, who at present resort to *no* temple, and practise *no* act as an act of devotion? Can it be wise, can it be *humane*, to set such persons free from the law of the fourth commandment, when the observance of it cannot fail to produce effects as beneficial to society at large, as to individuals themselves?

"While travelling the journey of life," says a most learned and eloquent divine, "whether the path lie through a bleak and barren waste, or through verdure

and flowers, mankind, unless frequently reminded of the end and object of their pursuit, would faint under the difficulties to which they are exposed. On the *seventh* day they are so reminded; on that day they are cautioned of the danger of loitering on the way; the all glorious reward of victory is laid before them, and they are exhorted to press forward towards the mark for the prize of their high calling in Christ."

But perhaps some may say, this is but begging the question; that this may apply to *Church-goers*, but what has it to do with the community at large? This is a point not over-looked by the same excellent writer, and his observations I think are admirable.

"How is it possible," says he, "for those who are endowed with but ordinary sensibility, to behold the holy preparations of the Sabbath, without some serious thoughts arising in the mind? The noise of rustic labour ceases, the din of mercantile tumult is hushed, the shops and marts of business are closed, and the opened gates of the temples of our God *invite* the multitudes who crowd the streets to assemble in the consecrated precincts. Who can witness so many human beings congregating together for the purpose of divine worship, without feeling a desire to join in paying adoration to the Sovereign Lord? He who can be a cold and unmoved spectator of thousands of his fellow-creatures assembling to celebrate their Creator's praise, must possess a heart but little susceptible of any gentle and virtuous impulse."

What can be the use of scrutinizing too closely the exact character of the fourth commandment; as though Christians would be justified in casting it aside as a mere ceremonial law of the Jews? If a positive law be conducive to moral ends of the highest importance;

if it be found to promote the peace and harmony of society; to restrain the vicious appetites of mankind; to draw them away from too great a fondness for earthly things which must come to an end, and give them a foretaste of the joys of heaven which will never end; if it tend to keep us from any breach or transgression of the other nine commandments, which are allowed to be of a moral nature; lastly, if it be calculated to give us right notions of our present uncertain mortal state, and enables us to keep up our acquaintance with heaven, who, *with any feelings of humanity*, could ever consent to banish from the world the blessing of the Sabbath Day, though it should *seem* to have come to us in the *form* of a *positive* ceremonial law.

“It is no rash assertion,” says a very sensible Transatlantic prelate, “that from this holy institution, (the Sabbath) have accrued to man, more knowledge of his God, more instruction in righteousness, more guidance of his affections, and more consolation of his spirit, than from all other means which have been devised in the world to make him wise and virtuous. We cannot fully estimate the *effects of the Sabbath*, unless we were once deprived of it. Imagination cannot picture the depravity which would gradually ensue, if *time* were thrown into *one promiscuous field*, without those *heaven-erected* beacons to rest and direct the passing pilgrim. Man would then plod through a wilderness of being, and one of the main avenues which now admits the light which illumines his path, would be perpetually closed¹.”

Is the Decalogue to be abridged of such a law, because it is of too positive and ceremonial a character

¹ Sermons by the late Right Rev. Dr. Dehon, Bishop of South Carolina.

to be adopted by Christians ! Is no distinction any longer to be put upon the *seventh* day, because some who call themselves Christians happen to feel and to think, that as far as regards piety and morality, the fear of God, and the love of man, every day should be a Sunday, and man's whole life a perpetual Sabbath ? Why was not the fourth commandment withdrawn from the Decalogue by the Jews themselves, before they deposited the *whole within the ark*, while the law of *ceremonial* ordinances was *not* so distinguished ?

“ No other cause for this distinction,” says Mr. *Holden*, “ can reasonably be assigned, than its being intended by the Almighty for *universal* reception. The laws of the two tables were written with the finger of God, to signify their identity with the law of nature imprinted on the heart of man, by the same Sovereign Lord : and they were placed *in the ark*, to intimate their *inseparable connection* with the covenant of *grace*, of which the Holy of Holies was an emblematical representation.”

I shall introduce one more extract from the writings of a living author, and justly celebrated divine¹, in proof of the moral bearings and effects of the law of the Sabbath.

“ I have often heard it remarked by Christians of a serious and devout disposition, to whom the sacred day of rest had become through habit and principle, a season of hallowed delight, that it seemed to their eyes, as if, on the Sabbath, the sun did shine more bright, the works of God appear more beautiful, the fields

¹ Benson's Hulsean Lectures.

more fresh, the flowers more sweet, and all the face of nature to wear an unusual and a fitting stillness. It is not that the sun does shine more bright, or that the fields are indeed more fresh, or the flowers more sweet upon this, than upon any other day. It is only that we are apt to think thus, because our *minds* are attuned to *order* and to *piety* and to *contemplation*. It is because our *hearts* are *harmonized* by the general repose and regularity around us. We look upon the joyful countenance of man, we hear no strife, we see no sorrow; labour is at an end, quietness is upon the scene, and our affections are weaned from earthly and fixed upon heavenly things. The goodness of God, and the beauty of holiness force themselves into our thoughts, and in the fulness of the feeling we almost fancy that the inanimate creation has been taught to sympathize with the benevolence of our souls, and to “remember,” like ourselves the Sabbath of God. This is mere imagination; but then it is a *godly* imagination, and God forbid, that by pointing out the cause of the delusion, I should rob the amiable mind of any Christian of a pleasing sentiment which he would wish to cherish, and which cannot possibly be productive of any ill effects.”

There is something very striking in the following short passage to be found in Mr. Hartley’s account of his visit to the Apocalyptic Churches in the year 1826.

“April 9. To-day we had the intention of proceeding but a short distance, a *Sabbath-day’s journey*; but unexpectedly not meeting with a single house for more than nine hours, we were compelled to proceed as far as Deenare. On leaving Chardar, at seven

o'clock, there was a stillness and serenity all around, which *seemed* to harmonize with a *Christian Sabbath*: but,—

“ ‘ The sound of the Church-going bell
These valleys and rocks never heard :’

or, if the invitation to Christian worship was ever known, it has long been succeeded by the cry of the Muezzin. O for the time, when we shall hear of *Christian Mustaphas, Omars, Alis, and Mehmetts*?”

I should not perhaps dwell so much upon the Sabbath, and upon the reasons we have for accounting its observance to be a matter of universal obligation, had it not been so mixed up with the Mosaic account of the beginning of things. Without attempting to discuss, as many very learned and serious Christians have done, the precise length of the demiurgic days, I am disposed to look to the admirable effects of an appointed Sabbath for the best clue, to this portion of the history of the creation. Dr. Geddes conceives the six days' creation to have been expressly *invented* by Moses, to account for the Jewish Sabbath. We may reasonably ask, what then could be the *true* account? It is much better said by Professor Jenkin, in his *Reasonableness of Christianity*, book ii. c. 9. “ If God saw fit to appoint one day in seven, to be a day of *rest*, this was sufficient reason for the assignment of six days to the work of creation, independent of all other reasons.” According to this idea, the works of God might be intended to serve for ever, as an exemplar and model for the works of man; but there is another very remarkable circumstance connected with the *Hexaëmeron*, and which I have treated of at length in one of the notes to my sixth Bampton Lecture.

Apion, the great adversary of the Jews, in his observations on the Hebrew Sabbath, (a very frivolous critique) admits that the SEVENTH day had *always* been a day of *rest*; and Philo has a long passage to the same effect, observing that it had become as general as the *hebdomal* division of time. From whom then could this *week*, with *one day* of *rest*, be so regularly derived as from the Jews, whose reckoning of their days was strictly hebdomadal, as first, second, third, &c. every *seventh* day only being distinguished by a *title*, and that *title* significative of *rest*? And how regularly and consistently this day or season of *rest*, was kept in view from the time of Adam to the days of the apostles, may be seen in the fourth chapter of the Epistle to the Hebrews, where the original Sabbatical *rest* expressed by both words σαββατισμος and καταπαυσις, the promised *rest* of the land of Canaan, and of the heavenly *rest* which yet “remaineth to the people of God,” v. 9. are so brought together as to be best described by the following passage from Isaiah: “Remember the former things of old: for I am God, and there is none else; I am God, and there is none like me, declaring the end from the beginning, and from ancient times the things that are not yet done, saying, My counsel shall stand, and I will do all my pleasure.” Chap. xlvi. 9, 10. Tacitus, in his strange conceit about the Jews, that they meant to do honour to *Saturn* by keeping Saturday holy, notices its *Sabbatical* character, “*Septimo die, otium, placuisse ferunt.*” According to Tertullian, the Christians in his days, because they kept *Sunday*, were exactly in the same manner charged with worshipping the *sun*. In the latter case, however, the charge itself amounts

to a proof that in the time of Tertullian, who lived in the second century, the Christians kept *Sunday* as a “day of joy,” which is his own expression; he also in various places calls it “the Lord’s Day.”

When our Saviour told his disciples that “the Sabbath was made for *man*,” he must have intended that it was meant for the rest and relief of his body, as well as to be spent in religious improvement; and certainly for man *generally*, that is for *all men*. Even Plato was for referring all festivals and *days of rest* to the appointment of the gods, *moved thereto by pity for those that were born for painful labour*.

One of the objections raised to the Mosaic order of creation, is, that it is unworthy of God to represent him as accomplishing the creation progressively and not instantaneously; and indeed it would be extremely difficult to say why Moses should have written so, if it had not been with some view to the *Sabbatical* institution. No person could have in a more sublime manner shown, that he knew it to be possible for God to have created the earth, and all things in it in an instant. “Let there be light, and light was;” “let there be a firmament,” and there was a firmament; “let the waters be separated from the waters,” and they were separated.

The weekly division of time, which prevailed, as Scaliger observes, from the earliest times, “*ab ultimâ usque antiquitate*,” which is his strong expression, must surely have arisen out of the order of the creation recited by Moses; hence also probably the very general use and adoption of the number SEVEN in the Scriptures. To notice but a few, in the book of Revelation alone, the SEVEN churches, SEVEN candlesticks, SEVEN spirits, SEVEN stars, SEVEN lamps,

SEVEN seals, SEVEN angels, SEVEN vials, SEVEN plagues, &c.

Sometimes Moses is accused of inventing, at others of borrowing: in my own estimation he stands clear of both. When the number SEVEN was found to apply to our planetary system, it was immediately concluded that Moses had borrowed his hebdomadal reckoning from India, where planetary names had been given to the seven days. But besides that it is capable of proof that the reckoning by weeks was much anterior to the observation of the seven planets, we now know that the Sanscrit planetary names for the seven days, agree with those of the *Greeks* and *Romans*, of whom of course Moses could know nothing. Thus, *andeeta war* was their SOLIS dies; *soma war*, LUNÆ dies; *mungel war*, MARTIS dies; *boodh war*, MERCURII dies; *breehaspati war*, JOVIS dies; *sookra war*, VENERIS dies; *sanischer war*, SATURNI dies.

But it is time to turn to the second epoch mentioned by the Baron Cuvier, at the commencement of this section of my work, the DELUGE.

It has already been observed, and on more occasions than one, that since geology has become so fashionable, the authority of Moses upon all subjects strictly *philosophical* is pretty generally denounced; in foreign parts with a blameable irreverence, but, in our own country, where a better spirit prevails, with a becoming reverence, though almost as decidedly.

I confess such a denunciation has in itself never given me a moment's uneasiness. If Moses wrote by inspiration, it is of infinitely more importance, that he should have the credit of being a *prophet* than a *philosopher*. In strict truth he could not have been a philosopher, in the sense intended; and I have already

hinted, that, in my opinion, his *not* being a philosopher, greatly enhances his credit as a sacred historian. With respect to the deluge, for instance, let geologists decide as they please as to the evidences of such an event, still discoverable, or not so, on our present continents, I should be inclined to take the negative side of the question, and ask to have it accounted for, why the body of the earth, exhibits nothing that can be said to amount to a positive contradiction of such a catastrophe as Moses describes? We pretty well know where Moses passed the whole of the 120 years of his sojournment on earth, and consequently how very circumscribed a knowledge he must have had of the general face of the globe, when he wrote the history of the deluge.

Now, were our geologists, who have nearly searched all the world over, able to tell us, that they had never detected *any appearances of violent diluvian action*; any marks of the sea having *ever changed its bed*; of its having *covered all that is now dry land*, and *left proofs behind of such a nature* as to admit of no dispute, whether applied generally to a *succession* of mundane revolutions, or more particularly to *the Mosaic deluge*; if this had been the result of their examination of the earth's surface, what could we say, but that Moses, writing by *guess*, of what he could not have known experimentally, or intending to describe things mythologically for the amusement rather than for the information of those who were to come after him, must be excused for having described things so, as to receive *no* countenance or confirmation from the discoveries of after times; particularly from the researches of our modern philosophers, bent upon ascertaining, to the utmost of their power, the nature

of the revolutions that may have taken place on the surface of the globe.

Moses' account of the deluge is certainly given in such terms as to depicture a most awful catastrophe, by means of *water*, a destructive overwhelming of all the *inhabited* parts of the earth, to say the least; and surely we have a right to ask, does the earth on examination exhibit *no* signs of violent and sudden¹ catastrophes? Have no living creatures been apparently drowned and transported, under circumstances so inexplicable even at this day, as to baffle the skill of the most eminent naturalists to account for their appearance in the places where they find them? Has nothing been discovered indicative of such changes on the surface of the earth, in the level of the sea, in regard to climate and other localities, as seem to bespeak a former different state of things; such as, if the Mosaic or Noachic deluge were true, we should be disposed to call *ante-diluvian*, in contradistinction to the *post-diluvian* earth we seem to be inhabiting? Lastly, if Adam were not the first of our race, have no traces been any where found of a race of *Pre-adamites*?

These surely are questions we have a right to ask, considering that Moses could not have written philosophically of such things, nor yet historically, but at great risk of being found guilty of mistakes, quite *incorrigible*, that is, exposed to positive contradiction, as has indeed been observed before. Michaelis has made the remark, that the author of the Pentateuch wrote more accurately of the places and regions which were nearest to him, than of any more remote, and

¹ See Cuvier's Theory of the Earth, p. 36, 37, who thinks that in certain cases, *slow* causes cannot be admitted.

particularly marks the limits within which his geographical knowledge of the globe appears to have been confined. All the ancient writers, indeed, seem to have written under great ignorance of places at any great distance from their own country. Josephus in his tract against Apion, has dwelt largely upon this; he mentions the case of *Ephorus*, one of the best of the Greek historians, in *his* estimation, who thought Spain to be but one city, and notices the total silence of Herodotus, Thucydides, and other historians, as to the affairs of the Romans. Now Herodotus, Thucydides, &c. wrote nearly a thousand years after Moses, and yet seem to have interested themselves very little about what was passing in some of the most conspicuous portions of the globe; we may well conclude therefore, that Moses, *humanly* speaking, must have written the Pentateuch in much ignorance of distant and remote parts, and yet he ventured upon an history of the very beginning of things, as regarded our whole species; that is, in short, of *Adam* as the progenitor of the whole human race; and has never been contradicted. No, not by any subsequent fossil discovery of those *scientific* hyperboreans, of the existence of whom MM. *Buffon* and *Bailly* appear to have been so sure; a people able to discover the lunisolar period of 600 years, which *must*, says M. *Buffon*, have required two or three thousand years exertion of the human mind.

The deluge, as connected with terrestrial phenomena, remains in the hands of geologists, an apple of discord, as much as ever; some think they have discovered indelible traces of its ravages; others profess to see nothing of the kind; some think they can trace back the exact age of our present post-diluvian

continents by such regular *chronometers* as to leave no doubt upon the subject; others make use of the very same chronometers¹ to prove that no such dates can be relied on.

“The grand fact of an universal deluge,” (I am citing the words of no less a man than Professor Buckland), “at no very remote period, is proved on grounds so decisive and incontrovertible, that had we never heard of such an event from Scripture or any other authority, geology of itself must have called in the assistance of some such catastrophe to explain the phenomena of diluvian action, which are *universally* presented to us, and which are unintelligible without recourse to a deluge exerting its ravages at a period not more ancient than that announced in the Book of Genesis.”

“Of the Mosaic deluge particularly,” says Dr. Macculloch, “I have no hesitation in saying, that it has never been proved to have produced a *single existing appearance of any kind*, and that it ought to be struck out of the list of geological causes².”

I could not have placed the above remarks in such glaring opposition to each other, for any other purpose than to show what different views have been taken of the very continents on which we are passing our lives, by eminent geologists, in the compass of but a few years; and to satisfy any sincere believers who may feel interested, in the discovery of coincidences of the nature alluded to, between the sacred history of the earth, and terrestrial phenomena, that whatsoever discouragement they might receive from Dr. Macculloch’s strong denial of all existing evi-

¹ The deltas of rivers particularly.

² System of Geology, vol. i. pp. 445, 446.

dences of the flood, to be traced on our present continents, they may still have the support of so very eminent an observer, and so renowned a geologist, as Mr. Professor Buckland.

But this is not all ; Dr. Buckland has not expressed himself more strongly and decisively upon this head, than many other geologists of great name. Dr. Buckland is living, and I have the honour and pleasure of his acquaintance ; but such has been the conflict of opinions upon geological subjects even within my own memory, that I am almost scrupulous of citing any of my *older* acquaintance, particularly *De Luc* ; with whom the task of determining the *age*, the *low age*, of our present continents by regular *chronometers*¹, originated, and much of whose valuable life was passed in collecting proofs, by personal observation, in all the great states of Europe, as his books and papers in my possession would abundantly show. But his opinions upon the subject have long been known to the public at large, and I need not swell my book by

¹ As I am not writing for the information of philosophers or geologists, but of general readers, likely to be attracted to the perusal of geological works, more perhaps by the thirst of *amusement* than of actual knowledge, such works being often in the form of *Travels*, &c. &c., I shall explain what is meant by these terrestrial *chronometers* or measurers of the lapse of time since the birth of *our* continents, in the words of the Baron Cuvier.

“It must, in fact,” says the Baron, “have been since the last retreats of the waters, that our present steep declivities have begun to disintegrate, and to form heaps of debris at their bases ; that our present rivers have begun to flow and to deposit their alluvial matters ; that our present vegetation has begun to extend itself, and to produce soil ; that our present cliffs have begun to be corroded by the sea ; that our present downs have begun to be thrown up by the wind ; just as it must have been since this same epoch, that colonies have begun, for the first or second time to spread themselves, and to form establishments in places fitted by nature for their reception.”

uncalled for extracts, much less by any needless vindication of his just fame, from the cavils of certain of his opponents. I cannot, however, avoid transcribing the testimony of one of his contemporaries, who did not agree with him upon all points. I mean the celebrated Dolomieu, with whom also I once carried on a correspondence, and whose account of the *Lipari* Islands, I was at the pains of translating into English ¹, more, I think, than forty years ago.

Now the testimony of Dolomieu, in corroboration of De Luc's opinion, as to the age of our continents, is if possible stronger than even Dr. Buckland's; it may be found indeed in my own translation of the *Geological Letters* in the old series of the "British Critic," 1793, 1794, 1795; but as M. de la Fite has judged proper to print it otherwise, in *his* translation of 1831, adding something of *additional* effect, and certainly

¹ In conjunction with another deceased friend of mine, Dr. Beddoes, whose *Life* was afterwards written and published in 4to. by Dr. Stock, I undertook the translation of the work; Dolomieu engaged to send us drawings of some of his own specimens deposited in the King's Library, at Paris, a bookseller was engaged and an engraver, and all that Dr. Beddoes had to contribute, was a Preface, on the *Vulcanian* and *Nep-tunian* Systems. Whoever may have read Dr. Stock's *Life* of my friend and proposed co-operator, will not be surprised to find that at the last moment he deserted us. Incessantly occupied in new pursuits, as his curiosity became excited, by any object requiring research and elucidation, by the time I had finished *my* share of the work, he was deeply engaged in his experiments upon *airs*, and when I met him at Bristol Hot Wells, and put my translation into his hands (which I never saw afterwards), I found him so absorbed in his endeavours to find a cure for that horrible disease the *Phthisis Pulmonalis*, that had he put my manuscript in the fire before my face, I should have found it in my heart to have forgiven him. He did not despair of finding time to write his Preface, but his geological fervour was for the moment half extinguished, and he did not live to accomplish that and abundance of other things, which had at different times occupied and deeply interested his over-ardent mind.

nothing inconsistent with the original, *possibly* taken from some other work of *Dolomieu's*¹, I shall give it in *his* words, only inclosing within brackets M. de la Fite's very reasonable additions.

“I will defend a truth which appears to me *incon-testible*; [which the words of De Luc have rendered evident to me], and of which I find proofs in every page of [the] history [of man] as well as in what it naturally should be referred to, the facts visible in nature; [with M. de Luc I shall say], that the present state of our continents is not ancient; [with him I think], that it is no long time since they have been given up to the dominion of man.” This testimony is the more noticeable, because upon another occasion, in which *Dolomieu* was supposed to fall in with the *Huttonian theory*, Professor Playfair boasts of his support in the following remarkable terms: “In this conclusion the two theories perfectly agree: and if they do so, it is only because the nature of things has forced them into agreement, notwithstanding the dissimilitude of their fundamental principles.” If the concurrence of *Dolomieu* was so irresistible in the one case, we have a right to conclude it may have been equally so in the other.

After these comes the Baron *Cuvier* himself, the oracle of modern geologists, so lately lost to the world, and so much to be lamented.

“It may be seen,” says he, “that nature everywhere distinctly informs us, that the commencement of the present order of things cannot be dated at a

¹ The work cited by M. de la Fite, is, the *Mémoire sur les Pierres Composées et sur les Roches* (Journal de Physique de Paris, tom. xli. part ii. p. 42. 1792).

very remote period; and it is remarkable that mankind every where speak the same language with nature." In another place,

"I am of opinion with M. *De Luc* and M. *Dolomieu*, that if there is any circumstance thoroughly established in geology, it is that the crust of our globe has been subjected to a great and *sudden* revolution, the epoch of which cannot be dated much farther back than five or six thousand years ago; and that this revolution had buried all the countries which were *before inhabited by men*, and by the other animals that are now best known. That, on the other hand, it laid dry the bottom of the last sea, and formed of it the countries which are at the present day inhabited; that it is since the occurrence of this revolution, that the small number of individuals displaced by it have spread and propagated over the newly exposed lands, and consequently that it is since this epoch only, that human societies have assumed a progressive march, that they have formed establishments, raised monuments, collected natural facts, and invented scientific systems."

I have carried the above extract rather farther, than I find it quoted by Professor Buckland, in order to include a portion of the Baron's theory, to which, I believe, the learned professor has never signified his assent. I mean the submersion of the ante-diluvian inhabited continents, leaving our present continents, the former bed of the sea, dry.

Into this question I have no business to enter at any length. Dr. Buckland, after citing the first part of the above passage from Baron Cuvier, in his inaugural Lecture, concludes, "The two great points then of the low antiquity of the human race, and the

universality of a recent deluge, are most satisfactorily confirmed by every thing that has yet been brought to light by geological investigations."

A very different conclusion certainly from Dr. Macculloch's; but let me not do any injustice to the last-named diligent observer, he of course leaves us the full benefit of the Mosaic history, as to the history of *man*.

The Dr. is decidedly one of those, who judge it not to be fit to *seek support* for the Scriptures in geological researches and conclusions; and in this I agree with him, not thinking that the Scriptures need *press into their service* geology or any other science; but I cannot see that it is any degradation to the Scriptures or any impediment to the progress of knowledge, as has been insinuated, to accept support from the science of geology, when it may be received at the hands of such distinguished naturalists, as De Luc, Dolomieu, Cuvier, and Buckland; to whom, might be added, Saussure, Brogniart, Kennedy, Professor Jameson, (in his edit. of Cuvier, p. 378), Townsend, &c., &c. but Dr. M. regards the Deluge in toto, as "that eternal resource of every geologist, who finds none in his own intellect, and not to be appealed from, but under the fulminated penalties of all the infallible theories." The Doctor's strictures are certainly severe, but very amusing.

But it is time to notice the other peculiarity, if I may call it so, of De Luc's system, which the Baron Cuvier seems to have adopted: I mean, the mode in which the punishment of the Deluge was brought on the condemned inhabitants of the ante-diluvian continents. He supposes those continents sunk with all that were upon them, and that we are now inhabiting the

bottom of that sea, which was displaced by the sinking of the condemned continents. Of course, therefore, nothing decidedly ante-diluvian, as far as regards the race of *man* may probably remain; it is still doubted whether we find any in a fossil state; and it is certain, and I think very remarkable, that not only in the original denunciation, Genesis vi. 13, all flesh were to be destroyed "*with the earth*¹," i. e. the earth on which they dwelt, but that St. Peter, no otherwise connected with the patriarchal ages, than as an apostle of HIM who was the ALPHA and OMEGA, the *beginning* and the *end*, should have described the catastrophe of the Deluge, as the "*perishing of the world that then was*, by an overflow of water," 1 Peter iii. 6.

I know not whether such references will be judged to savour too much of a physico-theology, to be admitted by certain geologists, as any proof of the destruction of the ante-diluvian continents, but in such a work as the present, I *trust* the authority of St. Peter for one mundane revolution, may, at the least, be allowed to stand upon as good a footing, as the authority of the *institutes of Menu* for many. I say not this out of any disrespect to Mr. Lyell, who has made the reference to which I allude, but because no geologist has evinced, perhaps not altogether without reason, a greater jealousy of systems and theories, deduced solely from the words of Scripture. He ex-

¹ De Luc was so desirous of not making more of this system of the Deluge than the words of Scripture would fully warrant, that he applied to many Hebrew scholars, without any communication of his views, for the most literal translation they could furnish, and it is remarkable, that *Michaelis* was one, who in his own German version renders it, "Behold I will destroy them, and the earth with them."—De la Fite's Introductory Remarks—more may be seen upon the subject in the publications of Mr. Penn, and more recently of Mr. Fairholme.

pressly states, “that the progress of geology has been only a constant and violent struggle, between new opinions and *ancient doctrines*, sanctioned by the *implicit faith* of many generations, and *supposed* to rest on *Scriptural* authority.”

The universality of the Noachian Deluge, has always been a questionable point with modern philosophers, especially when insisted upon by *physico-theologists* as the *cause*, and *sole* cause of the *marine* deposits, so observable and so numerous, on our present continents; but if the flood were universal as to all that were doomed to perish for their unrighteousness and sin, this seems to be as much as the Scriptures require. This is no *new* idea, and therefore no evasion. In the *Origines Sacræ* of the very learned Bishop Stillingfleet, published in 1709, I find the following passage: “It is very evident that the flood was universal as to *mankind*; but from thence follows no necessity at all of asserting the universality of it as to the globe of the earth, unless it be sufficiently proved that the whole earth was peopled before the flood, which I despair of ever seeing proved¹.” In another place we have the following question, by the same learned author: “What reason can there be to extend the flood beyond the *occasion* for it, which was the *corruption* of *mankind*?”

In M. de la Fite’s introductory remarks to his republication of De Luc’s Geological Letters, he cites *Le Clerc*, very much to same purpose²; “*Consentiunt quidem omnes, diluvium eatenus universale fuisse,*

¹ *Origines Sacræ*, Book III. Chap. IV. §. 3.

² *Vossius* and *Mabillon* are also mentioned as supporters of the same opinion. The former at the risk of having his books condemned as heterodox by the Assembly of Cardinals at Rome.

quatenus *totum orbem habitatum* oppressit, univsumque humanum genus, exemptâ Noachi familiâ, eo interiit." The expression of Josephus in the first Book of his Antiquities, as nearly as possible describes the fact to have been as stated; "He turned the dry land into sea," ¹ says he, "and thus were all these [wicked] men destroyed." Moses, it is said, was no philosopher; then it is not reasonable that his credit should be affected, by his having asserted, in his account of the catastrophe of the Deluge, that "all the high hills that were under the whole heaven were covered," for unless he had known, which it is certain he could not have known *philosophically*, that the earth was a spherical body, the expression, "under the whole heaven," might, as M. de Luc has in his sixth letter justly observed, imply only the whole horizon of the inhabited lands.

Mr. Lyell speaks of *Quirini*, who wrote, *De Testacis Fossilibus Mus. Septaliani*, in the year 1677, as "The first writer who ventured to maintain that the universality of the Noachian cataclysm *ought not* to be insisted upon." The utmost *we* should say, is, that it *need not* be insisted upon, according to the authorities just cited, and to whom may be added Bishop Clayton.

So far then from the marine exuviæ discoverable on our continents and islands, and which, as *Cuvier* has observed, abound every where, being deposited there by the waters of the Noachian Deluge, it seems to be by many writers considered more probable that they were deposited at the bottom of ancient seas, long before the Deluge, and only brought to light, when

¹ εἰς θάλασσαν τὴν ἡπειρον μετεβαλε. Philo, has some expressions very striking, who speaks, not only of a *sinking* beneath the waters, but of a *parting* or *breaking off*, as it were.—ΦΙΛ. ΙΟΥΔ. περὶ Αβραμ. 241.

by the sinking of ancient continents, the sea rushed in and abandoned its former bed; and in this view of things, De Luc's anti-chaotic opponents Mr. Penn and Mr. Fairholme perfectly concur; supporting their opinions, as well as M. de Luc, with much learned criticism, on the original denunciation, Gen. ix. 11, and on St. Peter's subsequent account of the catastrophe. Notice is very fairly taken of the hyperbolical use of language amongst the Jews, instances of which might be produced without end, not from the Old Testament only, but the New. St. Peter, however, seems to have put some limitation on his own expressions, applicable to the subject in hand; where he qualifies as it were, the general expression, 2 Peter iii. 6, ὁ τότε κόσμος, "The world that then was," and which "perished by the flood," by calling it in another place, κόσμος ἀσεβων, "The world of the *ungodly*." I am not meaning to decide upon the question myself, for I am quite persuaded that the Deluge was sufficiently universal to answer all the ends of a divine correction, but the above expressions, do certainly appear to correspond very much with the universality contemplated by Bishop Stillingfleet, Le Clerc, Vossius, &c. as simply co-extensive with the corruption of mankind.

Geologically, it may be said only to affect the question concerning the submersion of ancient continents, and the comparatively recent elevation of the present continents, as the *post-diluvian* inheritance of the sons of Noah; including of course the further question relative to the *natural chronometers*, supposed to be indicative of such a course of events, and decisively so.

I am rather surprised that one piece of criticism

should have escaped observation upon this occasion. I mean the force of certain terms both in Hebrew and Greek, often put for the *whole earth*, and the *whole world*, but with an express reference to a certain portion only, more or less, of its *inhabited* parts. As for instance, Luke ii. v. 1. where it is asserted to have been the decree of Cæsar Augustus, that “all the world should be taxed,” though it must have meant no more than all parts of the Roman empire. Now the expression here used is *οικουμενη*, a term by its very derivation, more applicable to the *dwellers* upon the earth, than to the earth alone. It is a term very commonly used by the *seventy*, the Hebrews employing the term *תבל* exactly in the same manner¹. The following passage from one of the fathers of the Christian Church, after what has been said, will not appear out of place. “Listen!” says St. Chrysostom, “the deluge was the common wreck of the inhabited land;” *το κοινον της ΟΙΚΟΥΜΕΝΗΣ ναυαγιον*.

Mr. Fairholme in his remarks on the deluge, in addition to other authorities, has cited a very curious passage, from the apocryphal book of Enoch, referred to in the Epistle of Jude, ver. 14, and judged to be lost, but discovered of late years by Mr. Bruce in Abyssinia, and translated from the *Ethiopic* by the present Archbishop of Cashel, who obligingly sent me a copy, and I have it now lying before me. As Mr. Fairholme’s

¹ In writing my book, on the Plurality of Worlds, many years ago, I had particular occasion to investigate the proper force and meaning of all the words in Scripture used to express the *earth* or the *world*, and was able to make out to the satisfaction of many competent judges, that their power and compass is such, as by analogy, easily and without any force being put upon them, to apply in some of the sublimest passages of Scripture, as well to other inhabited earths, worlds, or planets, as to this.

book stands a chance of becoming better known than my own, I shall forbear to introduce the passage here, but having this occasion to mention the work referred to, I cannot help observing that being undoubtedly written by a Jew, and before the appearance of Christ in the flesh, it asserts in plain terms his pre-existence, as Son of God and Son of man, contrary to the assumption of those who call themselves Unitarians, and who have generally maintained, that no Jew of any age, ever held such an opinion; a circumstance, the learned editor of the Book of Enoch, as well as myself, had long ago occasion to know, though we had not at that time this strong proof of the opposite fact to produce¹. The history of man as a religious, as well as rational being, is so connected with the character of our Saviour upon earth, as shown in a former part of this work, that I could not refrain from noticing a circumstance, so highly interesting, as a Jewish testimony in favour of our Lord's divinity.

Whether the Noachian deluge were strictly universal or not so, it is extremely possible that at that period, many animals now found in a fossil state, became extinct. The Mosaic history speaks of great changes having taken place in the condition of man, and why may it not have been the same with regard both to animals and vegetables. The longevity of the antediluvian patriarchs appears to have been known by tradition to the Pagan world; and geology announces great changes to have taken place in the vegetable and animal kingdoms, and would fain assign the exact epochs of such changes; but in this surely she

¹ See Archbishop *Lawrence's* Critical Reflections on the Unitarian Version of the New Testament, and *Nares's* Remarks on the same, 1810, 1811.

may be deceived. As to changes of temperature and climate, which could not fail to affect both animals and vegetables, Mr. Lyell has written largely upon the subject, and with great ingenuity shown, how much may depend on the variations of land and sea, in particular localities, and as differently proportioned the one to the other.

We have certainly no reason to be startled at any scientific discoveries that announce great changes to have taken place in time past; for we read of great changes in the Bible, and more perhaps than we are in the habit of attending to. Geology indeed tells us, that our race did never co-exist with assemblages of animals and plants, of which all the species are extinct¹; and Professor Playfair particularly observes, that “a change in the animal kingdom seems to be a part of *the order of nature*, and is visible in instances to which human power cannot have extended.” Then I apprehend, as human creatures, we need not in reality care much about such changes, or such animals. if they had nothing to do with us, why should we have any thing to do with them?

Professor Ure, in his system of geology, seems to think that many powerful and ferocious animals were providentially allowed to perish at the time of the deluge, as inconsistent with the more general dispersion of mankind, and contracted supply of food and herbage after the flood, and why not, in consideration also of the altered state of man? Why may we not suppose that some of the hideous animals, which the comparative anatomists have found for us, may have been more suitable to the very corrupt state of the

¹ Lyell, i. 154.

ante-diluvian population, than to ourselves, corrupt as we are ; and been suffered to co-exist in the way of correction and punishment, to annoy, plague, harass, and alarm, those sinful, incorrigible generations of men? At periods, not quite so bad perhaps, though bad enough, how frequently do we read, in the *prophetic* denunciations of punishment for sin, apostasy, idolatry, &c. of the sinner and all belonging to him, being delivered over as a prey to wild animals? *Thus*, Isaiah describes the “ day of the Lord’s vengeance, and the year of recompences for the controversy of Zion.”

“ It shall lie waste ; none shall pass through for ever and ever. But the *cormorant* and the *bittern* shall possess it; the *owl* also and the *raven* shall dwell in it. Thorns shall come up in her palaces; and it shall be an habitation for *dragons*. The *wild beasts* of the *desert* shall also meet with the *wild beasts* of the *island*, and the *satyr* shall cry to his fellow; the *screech-owl* also shall rest there; and the *great owl* make her nest; and the *vultures* be gathered together.” And in another place we read, “ their houses shall be full of *doleful creatures*, *owls* shall dwell there, and *satyrs* dance there.”

Let us only in imagination, substitute for the cormorants, bitterns, owls, ravens, dragons, wild beasts of the desert, satyrs, screech-owls, vultures, and doleful creatures, in the above sublime denunciations, some of our fossil acquaintance, as the several species of *Ichthyosaurs*, *Plesiosaurs*, (one of which, the *dolichodeirus*, was more than twenty feet long) the long-beaked and short-beaked *Gavials*, the *Megalosaurs*, the *Pterodactyls*, and a few *Pachydermata*, such as the *Palæotheria*, *Lophiodonta*, *Anaplothéria*, *Anthra-*

cotheria, *Cheropotami*, &c. &c. and we might bless ourselves that we should happen to be, at the least, *post-diluvians*.

Having myself travelled as it were into the region of conjectures and suppositions as to things past, I hope I shall not be thought to be trifling with the Scriptures, if I offer a few more remarks on the antediluvian condition of the globe. Many of the fossil vegetables and animals discovered in our strata, are found to be of such magnitude, as to be distinctly called *gigantic*, comparatively, that is, with recent specimens; now every body knows, that in the fourth verse of the sixth chapter of the Book of Genesis, the following passage occurs, “There were *giants* in the earth in those days.” Some actually read *monsters*, but I am inclined to think they were human monsters, i. e. monsters in wickedness. As however the times referred to, were in truth the very times of Enoch, so lately mentioned, I am induced to copy what is said of those giants or monsters in the lately recovered Book of Enoch.

Chap. vii. 11. “And the women conceiving brought forth giants. 12 Whose stature was each three hundred cubits. These devoured all which the labour of men produced, until it became impossible to feed them. 13 When they turned against men in order to devour them; and began to injure birds, beasts, reptiles, and fishes, to eat their flesh one after another, and to drink their blood, 15 Then the *earth reproveth the unrighteous.*”

In another Chapter of this ancient and curious Book, occur the two following verses. “In that day shall be distributed for *food*, two *monsters*. A female monster, whose name is *Leviathan*, dwelling in the

depths of the sea, above the springs of waters; and a male monster, whose name is *Behemoth*, which possesses, moving on his breast, the invisible wilderness.” “These two *monsters* are by the power of God prepared to become food, that the *punishment* from God may not be in vain.”

I expect to have occasion to speak elsewhere of the sublime manner in which these two extraordinary animals are described in the Book of Job. In the above extract, they are decidedly considered as *antediluvian monsters*; which considering the little we know of them to this day, is a fact of some importance. As far as regards ourselves they appear to be of an extinct race, and *we* therefore need not care much about them; but whether they are done with for ever is another question. *Geologically* perhaps not; we are at least told, that in *the order of things*, on which it is become so fashionable to place no ordinary reliance, they actually may come again; not only Leviathan and Behemoth, but all the animals with long Greek names, buried alive or dead, before any such place as Greece was ever heard of. I am even able, on excellent authority, to tell posterity (if the world will be civil enough to preserve for ages to come the little Book I am writing) the very season when such an event may be looked for; namely, “in the summer of the great year, or geological cycle,” when by an increase of temperature, tree ferns, and arborescent grasses shall again predominate over the dicotyledonous plants of our present temperate regions. For “then,” says Mr. Lyell, “might those genera of animals return, of which the memorials are preserved, in the ancient rocks of our continents. The huge *Iguanodon*” (of which more hereafter) “might re-

appear in the woods, and the *Ichthyosaur* in the sea, while the *Pterodactyle*¹ might flit again through umbrageous groves of tree ferns; coral reefs might be prolonged beyond the arctic circle, where the whale and the narval now abound; turtles might deposit their eggs on the sand of the sea beach, where now the walrus sleeps, and where the seal is drifted on the ice-floe."

Mr. Lyell only indeed tells us how all this *might* be, and under what circumstances, and at what time it might *perhaps* happen; but as it could not be, without great increments of heat, we should seem to have a resource in Buffon's more promising assurances, that we are constantly getting cooler, and by no means hotter. That our planet which came more than red hot from the sun, has in fact been cooling ever since, and will continue to do so, till the extremity of cold shall bring on annihilation. How far things may at this time be from the very comfortable rest and repose of absolute annihilation, I cannot pretend to say, it will depend on the fraction remaining to be worked out, or cooled down, of about 720 centuries; for as it required, we are told, 72,000 years to bring it to a proper temperature for the sustenance and growth of animals and vegetables, the same lapse of time must take place before it becomes again totally unfit for such purposes.

Speculations of this nature may be amusing, but

¹ A figure of the *Pterodactylus Longirostris*, may be seen in Blackwood's edition of Cuvier's Theory of the Earth. Cuvier very justly observes, "Its appearance would be frightful if they occurred alive at the present day." However, if they should come back again, it may be something to know, they are not likely to be much bigger than a thrush, or a very large bat.

surely they are too amusing to be dangerous. Who would think that Whiston or Woodward, I forget which, who supposed the earth to have been a comet, could fancy that it was the heat of the comet not sufficiently reduced, that excited all the living beings to sin; for which they were all drowned, *excepting the fishes*, whose *passions* were apparently *less vehement*; had we all continued *fishes* or *inhabitants* of the *sea*, as *Demaillet* thought *we* once were, how much of vice and wickedness might have never been known.

That natural causes are daily operating all around us, is clear and certain; that they must force themselves upon the observation and attention of most men is also certain; that they are in the highest degree fit objects of the scrutiny and investigation of all lovers and promoters of science cannot for a moment be doubted; nor in the present highly advanced and advancing state of science, need we perhaps be distrustful of any thing, but the propensity to tell us more of things, past or future, than the generality of persons can *want* to know, or science itself can reasonably be expected to tell us. The surface of the earth bears witness, as far as we can look, to great disturbances. "It appears," says the elegant author of the mechanism of the heavens, "from the marine shells found on the tops of our highest mountains, and in almost every part of the globe, that immense continents have been elevated above the ocean, which ocean must have engulfed others." I have shown that the Noachic deluge is judged by many to have been a catastrophe of this very nature. Buffon considered the sinking of continents to be *so probable*, as to attribute to such a catastrophe, the

Mediterranean and other inland seas, the islands therein being tops of mountains not wholly submerged; and it may be added, that Diodorus Siculus, Strabo, and other ancient writers, decidedly thought there had been a time when the Mediterranean did not exist.

The question still remains, what revolutions and changes of this description have been brought about by natural causes, operating according to the *order of things*, without the special and immediate interposition of providence; and what have taken place, not merely for natural ends and purposes, but to accomplish some great end of God's moral government of the world, with which as individuals, we have evidently, in point of time, but little connection, and as human beings, by all accounts, (geological as well as theological) not much more. This, I confess, prevents my taking such interest as some seem to do, in the calculations of modern geologists, when they speak and write so confidently of the lapse of *ages*, of *myriads*, nay *millions of ages*; telling us all the while, not in direct terms, but evidently by *implication*, that Moses could not possibly have known, that the human race was comparatively a recent introduction, otherwise than by revelation from the Fountain of all knowledge, and the Source of all existences.

I confess, I have long been at a loss to comprehend, why geologists should seem so anxious to make the world, globe, or in fact planet on which we dwell, so exceedingly old, as they represent it to be, without the smallest attempt, as far as I can understand the matter, to place it in a more important point of view, than as the habitation exclusively of only the inferior

orders of living beings, from the Mollusca tribes to the Mastodons, and Mammoths, &c. nothing like the faculty of reason, or gift of speech appearing amongst them all; surely this is calculated to make us expect, that the introduction of the human race, whenever it happened, would be marked as an event of quite a superior description, and so announced, as to convey to our minds the strongest impressions of God's immediate and special interposition; for I cannot bring myself to look upon man as a mere development, and therefore feel myself, as others should do, greatly indebted to Mr. Lyell, for taking our part against Lamark, who would have made, as is well known, nothing but apes, and monkeys, and ourang-outangs of us; or even worse, a mere expansion of organic particles. Dr. Macculloch, speaking of *Lamark's* system, is puzzled to say whether it were the effect of Epicurism, disease, or imbecility. He acknowledges that *Lamark* was accounted in his time a great naturalist. "It might be so," he adds, "in empty shells."

I will acknowledge, that I was at first rather startled to find that *apes* and *monkeys* were missing from our ancient strata¹, as well as man, fearful that it might lead to a suspicion that if not identical, they were, as a link in the chain of beings, so decidedly next to man, as almost to belong to the same type of organization; but upon further consideration it appeared to me probable, that apes and monkeys might be expressly designed to show how near to the human species *organization* might ascend, and yet remain as far below it, for want of the higher faculties with

¹ "Not a single bone of a quadrumanous animal has ever yet been discovered in a fossil state." Lyell: but the fossil reliquæ of *tree animals* in general are, I believe, very rare.

which man is endowed, as any of the Mollusca or Testaceous tribes ; for this actually is the fact, though people in general may not always perceive it. On the contrary, most persons I verily think, are inclined to shudder at the organized resemblance, not considering that, after all, this ugly and offensive image of *man*, is as wide apart from the intelligent image of God, as earth from the heaven of heavens.

When this is duly reflected upon, we shall learn the better to appreciate the knowledge displayed by Moses, of the wide distinction between our species, and all creatures merely animal ; we shall learn to entertain more exalted ideas of the spiritual nature of man, and of the perfectibility, not merely of his earthly talents, which must be obviously confined within very narrow limits ; but of his very nature and being, when the corruptible body in which he now appears, shall have put on incorruption, when from mortal he shall have become immortal, death itself being swallowed up in the victory of our Lord Jesus Christ : such are the prospects of man theologically, and let me add, Mosaically ; for Moses foretold this victory and it has come to pass. Death is swallowed up ; “ we shall not all sleep,” in the graves to which we are hastening, but “ we shall all be changed.” Human creatures there are indeed so heedless of these great privileges and distinctions, as seemingly to prefer to live the life of the brutes that perish ; but let such persons understand, that the refuge of *perishing* is not open to *them* ; these also shall be “ changed” indeed, but not “ to the image of the heavenly,” to an image, I fear, worse than the earthy, in its most abject state of brutishness and despair !

PART V.

It used formerly to be regarded as a very plausible objection to the Mosaic history, that it seemed to assign so small an antiquity to our globe or system, as to be scarcely consistent with the infinite majesty of God. Here then geologists may appear to have stepped in, very much to the relief of revelation from so weighty a charge, especially such of them, as do not consider their boundless calculations to be inconsistent with the sacred history of man; and in truth, myriads and myriads of ages must go a great way to satisfy the minds of those who think the world too new (according to Moses) to be the work of God; but what can be new or old in the eyes of an *eternal* Being? And have we no instances in nature, of the possibility, not to say probability, of a NEW creation of a world or worlds? Most men of education must know by this time, that the loss of stars noticed in ancient catalogues, as well as the appearance of new ones, have led very eminent and pious astronomers to the conjecture, that in the course of God's providential government of the universe, some systems are from time to time dissolved, and others called into being; and that it may continue so till the period fixed for the final consummation of all things.

I shall state the fact, and the reasoning upon it in

the words of an eminent astronomer, Professor Vince, of Cambridge.

“ The total disappearance of a star, may probably be the destruction of its system, and the appearance of a new star, the creation of a new system of planets ;” and in another place, “ the disappearance of some stars may be the destruction of that system, at the time appointed by the Deity for the probation of its inhabitants; and the appearance of new stars may be the formation of new systems, for new races of beings then called into existence to adore the works of their Creator. Thus we may conceive the Deity to have been employed for endless ages, forming new systems of beings to adore him, and transplanting those beings already formed into happier regions, where they may have better opportunities of meditating on his works; and still rising in their enjoyments, go on to contemplate system after system through the boundless universe.”

I have no objection to “ endless ages,” and “ boundless space,” when associated with such objects as the Professor mentions. I mean for rational and intelligent beings fixed periods of *probation*, and the prospect of transplantation into happier regions; all this is consistent with what we know of that superior race of beings before our eyes, and already in existence upon the earth, but whose faculties, so far from being altogether earthly, find not scope or time enough here for their full display, if at all advanced beyond the common rate of intellectual improvement. Thus, Newton was obliged to leave many questions unresolved; a large “ legacy of research¹,” as it has been lately most happily ex-

¹ Sir John Herschel's Discourse, &c.

pressed, for want of time ; and Bacon only lived to light the torch which was to guide those who should come after him, into the way of truth.

“ It is beyond dispute,” says Professor Robinson, “ that several stars in the catalogues of Hipparchus, of Ulugh Beigh, of Tycho Brahe, and even of Flamstead, are no more to be seen : they are gone and have left *no trace*.” My friend Mr. Gleig, in his History of the Bible, (1830) very naturally asks, how is this to be accounted for, and what is become of them ?

“ Is it not reasonable,” says he in reply, “ to suppose, that those stars which have certainly disappeared, were the luminous centres of such systems as our own, and that having served the purpose for which they were formed, they are now reduced to that chaotic state in which the sacred historian assures us, that the solar system was, when ‘ the earth was without form and void, and darkness upon the face of the deep,’ and that when it shall seem good to the Divine architect, the matter of which they are composed may again be restored to beauty and regularity of form ? Nor is the incontestible fact to be passed over, in the consideration of this theory, that new stars are continually appearing in the heavens. May not these be the restoration to order of systems which had formerly been reduced to chaos, and thereby rendered *invisible* ¹,

¹ I have put the word invisible in italics, because though this may account indeed for their *disappearance*, as far as our instruments can reach, it may be doubted whether they do or do not continue in existence. Professor Robinson speaks of their having left *no trace*, and Sir John Herschel’s expression is quite as strong, who writes of “ the disappearance of several stars from the heavens, so completely as to have left no vestige discernible even by powerful telescopes.” Now if whole systems may, by the will of God, be withdrawn, in the course of

so that the process of forming and destroying worlds, may have been carried on from the beginning, and may be continued through all eternity, according to the will of the Supreme Creator and Governor of the universe, who neither slumbers nor sleeps, and whose eternal Son has declared, ‘My Father worketh hitherto, and I work.’”

It may be thought that *this* system of a destruction and renovation of worlds, rather countenances the opinion of our modern geologists, than otherwise; but the difference is very considerable. In the one case, we may be said to have obtained almost ocular demonstration, that all the planetary systems in the universe, believed to be, as well as our own planet, the abodes of rational and intellectual inhabitants, have their beginnings and their endings, as such, at the will of God, having no other permanency than his sustaining hand. The other systems in many instances profess to discover no beginning nor any ending; but to find in the common course of nature, proofs of the lapse of endless ages past, and a fair prospect of the like to come.

The former system speaks of periods of chaotic darkness, induced or removed, as it may please the Almighty, in fulfilment of his own special purposes, and for moral ends, connected with his providential government of the universe.

The other system contemplates no changes, inconsistent with the common course and order of nature, or for any ends and purposes except such as are purely physical. To destroy piecemeal existing con-

time, while others are brought to light, there can be no absolute objection made, to the *low date* of our own *orb* or system, supposing it to be actually a *new creation*.

tinents, and prepare others, in perpetual succession, to arise from the bottom of the sea, apparently leaving everything to the blind agency of fire and water.

Lastly, considering that the institutes of Menu, have been appealed to by geologists in support of the doctrine of a destruction and renovation of worlds, as the “*Divine Soul*,” and “*Supreme Essence*,” shall *happen* to be in a state of *repose* or *watchfulness*, how much more exhilarating is it, to be reminded in the extract above, that “HE who keepeth Israel, does neither slumber nor sleep.” Ps. cxxi.

Of the reduction of our own planet, or system, into order, from a chaotic or invisible state, we have a regular historical account; and it would certainly seem, had no comparative anatomist interposed, that this change had been, by the will of God, entirely designed to answer the purposes of *man*; to render the superficial parts of the globe subservient to *his* uses, and accommodated to *his* wants; and that he would have been accordingly introduced into it as soon as it was ready for him, and with some more observances and formalities than the fishes, cattle, birds, beasts, and creeping things, instead of coming as it were, accidentally upon the stage, with little more ceremony than Punch in a puppet-show. It should be remembered, or understood, that among the chief praises bestowed on geology, by a northern professor of distinguished name, this is one, that it “*even instructs us in the earliest history of the human species.*” It certainly does so, but I think too much in the way of a mere organic development.

The following is the account we have given us of man’s first appearance in the levels near Lewes in the county of Sussex:—

“The levels near Lewes afford so interesting an illustration of the silting up of the disrupted valleys of the chalk, during a *comparatively very recent period*, that we subjoin the following summary of the *sequence* of events which they record. First, there was a salt-water estuary peopled for many years by marine testacea, identical with existing species, and into which some of the large cetacea, as the sea-unicorn, and porpoise, occasionally entered. Secondly, the inlet grew more shallow, and the water became brackish or alternately salt and fresh, so that fresh water and marine shells were mingled in the blue argillaceous sediment at the bottom. Thirdly, the shoaling continued until the river water prevailed, and was no longer habitable by marine testacea, but fitted only for the abode of fluviatile species and aquatic insects. Fourthly, a peaty swamp or morass was formed, into which trees, and terrestrial animals, as deer, were occasionally drifted by land floods. Lastly, the soil, being only subject to periodical inundations from the river, became a verdant plain, through which the narrow Ouse now winds its way to the British Channel. It is in alluvial deposits of this kind that the remains of man *first* appear. Human skeletons, and the rude instruments of a half civilized race, are found associated with the bones of animals, which still inhabit this country, and in some instances intermixed with the osseous remains of a few species that appear to have been extirpated by man.”

All this may be exceedingly true; I have not indeed a word to say against it, as indicative of the comparatively recent introduction of man; my only ground of surprise is, that such an abundance of other animals, should have been in occupation of the earth

for such a length of time before man, as geologists have concluded to be the case. Almost in the next page to the one I have copied, the charms and advantages of geological inquiries, are said to be rightly and most eloquently described by Sir John Herschel, in the following words :—

“To the natural philosopher there is no natural objects unimportant or trifling. From the least of nature’s works he may learn the greatest lessons. The fall of an apple to the ground may raise his thoughts to the laws which govern the revolutions of the planets in their orbits; or the situation of *a pebble* may afford him evidence of the state of the globe he inhabits, myriads of ages ago, before this species became its denizens.”

I have printed in italics, only what I found so in the original—surely one would think, if the objects spoken of are so abundantly interesting to natural philosophers, it is a pity they should have been left, for myriads of ages, without so much as one natural philosopher to take notice of them. What myriads of bushels of apples must have fallen to the ground, according to the calculations of geologists, before any thing like a Newton appeared, to deduce from thence the wonderful laws of gravitation. I cannot bring myself to any adequate comprehension of the great delight to be found, in learning from a *pebble*, how much (how *very* much) older, the earth is, than Moses has represented it to be. I am in truth not antiquary enough to be very solicitous about the state of the planet before *Adam*. I speak as a theologian, but I still hope, free from any actual contempt of *science*, much more of such promoters of science, as Sir John Herschel.

I have always thought that in regard to the sacred history of the earth, a distinction should constantly be drawn, between its creation, and its preparation (if I may so say), for the abode and uses of man. The body of the planet may be of greater antiquity, than its present variegated surface, which is all we occupy; that surface supplies us with a number of things that are renewable; but some things of which we make constant use, are not so renewable, as to induce the belief that our earthly accommodations were designed to last beyond some fixed and approaching period. I speak of man in general. I cannot pretend (being neither “a gnome,” nor an “Umbriel,” nor a “dusky melancholy sprite¹,”) to know what is passing at the bottom of the sea, where geologists tell us fresh continents are preparing to succeed those on which we dwell, when the latter shall be thoroughly worn out; but it seems to me that the last dwellers upon the present continents may be much inconvenienced, by waiting for such renewals in the common course of nature², there being many articles of great use and value more quickly exhaustible, than will suit with the progress of such slow causes as are to reduce all our rocks and mountains, to the last stage of disintegration.

¹ See Mr. Lyell’s judicious remarks on the need of discretion in pretending to judge of things out of sight, vol. i. chap. v.

² We inhabit about a fourth part of the surface of the planet, and that portion is, almost exclusively, the theatre of *decay* and *not of reproduction*.”—Lyell.

In an essay by a writer, who professes to follow Mr. Lyell, I find the following seemingly inconsistent passage. — “Thus, on the one hand, the globe is continually being changed, and on the other, the work of regeneration is going on in about perhaps an equal ratio.”—Fraser’s Magazine, No. II; and is said of the *surface* of the globe.

Recently as man was introduced, among the inhabitants of this planet, according to geologists, many changes have taken place, relative to what may be called the *riches* of the earth. I am, of course, intending to speak of only one hemisphere; not of the subsequently discovered continents of America. I would also wish to add, that I do not pretend to *account for* the precise circumstances of those *ancient* continents, as historically recorded.

It is proposed as a question, in the *Lettres de Quelques Juifs à M. Voltaire*, whether there was not formerly more gold and silver in the world than now, p. 397; and in a note p. 407, the account of Agarthacides, preserved by Photius, of the immense quantity of gold amongst the Alileans and Cassandrins, in the southern parts of Arabia, is particularly noticed. Dean Prideaux has given us the same extract in his attempt to settle the true situation of Ophir, (*Connation*, Part I. v. 1,) where also may be seen the immense amount of gold furnished by David for the building of the Temple; but in the fifth book, the learned author particularly treats of the *superabundance* of gold and silver in those early times, where he has occasion to speak of the extravagant sum offered by Haman for the destruction of the Jews, Esther iii. 9¹.

It is mentioned of Lucullus, a Roman senator, that in one of his halls, which he called *Apollo*, he expended fifty thousand Roman *denarii* (which is near sixteen hundred pounds of our money), every time he supped there; and he supped there as often as any

¹ See Gibbon's Account of the Spanish Mines, worked by the Phœnicians. Roman Hist. vol. i. chap. vi.

of the better sort supped with him. Plutarch, who mentions this, does not expressly name the coin; but five myriads of *sestercii*, would come to four hundred pounds; prodigious enough for the entertainment of only *two* Roman senators, no more being present at the supper particularly alluded to by Plutarch.

In the southern parts of Arabia referred to by Agarthacides, it is supposed that Ophir was situated, whence Solomon in one year obtained gold to the amount of four hundred and fifty talents, which, reduced to our money, is three million two hundred and forty thousand pounds; but at length these rich mines were exhausted.

It is, however, generally admitted, by those who have treated of the origin of arts and sciences, either professedly or historically, that the precious metals were originally found on the *surface* of the earth, and were procurable in great abundance, without the labour of digging for them. They were also employed for purposes, for which they were not by nature fitted, as for arms, and tools to cultivate the earth. See Diod. Sic. Lib. I.

Herodotus tells us that the Egyptians put gold and silver to all sorts of uses; and this was found to be the case much more recently, with the Mexicans and Peruvians, when the Spaniards first explored their country.

M. Bailly, in his eccentric *Letters on the Atlantis of Plato*, appears to make it an argument of the great antiquity of his favourite hyperboreans, that arms, and tools of brass, and gold, have been found in abundance near the river Jenisca. Now, besides that the *want* of *iron* instruments is a direct proof of the little

progress they must have made in metallurgy, if he had but turned to the fifth book of *Lucretius*, he would have found, that such has been the progress of things from the first; gold and silver were first used, then brass, and *lastly* iron. Agarthacides indeed, so often cited, tells us that the *Alileans* and *Cassandrins*, were accustomed to give double the weight of gold for iron.

So far then from such relics as M. Bailly speaks of, being any proof of the perfection of the arts in such countries, they evince the very contrary; and to whatever people they may have belonged, so far from being marks of refinement, or of any great degree of perfection, they plainly prove them to have been in a comparative state of rudeness, if not in the very infancy of civilization.

And thus, perhaps, what we read of the profuse splendour, riches, and copious ornaments of ancient buildings, instead of supplying arguments for the great antiquity of the earth, may rather serve to demonstrate in a direct manner, the newness of our continents, and even serve as a foundation for curious calculations, in regard to the duration of our globe, in its present habitable state. For that many minerals both of use and ornament, are, and have for some time been progressively exhausting, we cannot, I think, possibly doubt; no modern argonauts would be tempted now to sail to Mingrelia in search of a golden fleece.

But to come to things nearer home. Coals, it is well known, have not been in general use many centuries, and yet some mines are already entirely exhausted, and forges and manufactories come to an

end, that had been erected for the particular local advantages of the fuel they supplied¹.

Several small coal fields are said to be exhausting so rapidly, that the time will not be very distant when that operation is completed. *Webster's Lecture on Geology*. "I may mention," says the author just cited, "the coal-field which supplies the neighbourhood of Birmingham with fuel, and which constitutes the richness of that part of the country. I inquired into the circumstances of its probable duration particularly, and was informed that at the rate they were then working, it was probable that in two hundred years at the furthest that great bed would be worked out." Newcastle is fast working out, but there is enough there to supply us for five or six hundred years, and *we* need not be afraid therefore of the loss of coal.

"The question has often been asked," Mr. Webster also remarks, "whether we can conceive it possible that coal will be at some time or other exhausted, and that involves another question, viz. whether coal is now forming? If coal be now forming there can be no fear of its being exhausted; we know, however, of no circumstance to lead us to suppose that coal is forming²." He makes several remarks in proof of this,

¹ Williams's Mineralogy. Professor Ure was inclined to think that the primitive strata of the globe, was not the result of deposition as Werner held, but so distributed originally by the Author of nature; and he instances the association of iron ore and coal-fields, its flux and fuel, &c.

² "Peat is formed," says Mr. W., "but peat is not coal, and we do not know that it will ever become such." Dr. Macculloch thinks, peat is "the preparation for future coal."

As to metallic veins, the Huttonians suppose them to be filled from

but the conclusion he draws is sufficient for our purposes.

It was calculated long ago, that in the town of Birmingham alone, the quantity of gold and silver annually employed in gilding and plating, and *thereby disqualified from ever afterwards appearing in the shape of those metals*, amounted to more than 50,000*l.* sterling, equal to the one hundred and twentieth part of the whole annual importation of those metals into Europe at the rate of six millions a year. Taking Europe and America together, it has been more recently calculated that about 8,700,000*l.* of new metal are annually devoted to ornamental and luxurious purposes.

The geologists will tell us that according to the *order of things*, nature is constantly employed in repairing her own destructive operations on the face of the earth, and that whatever of waste and decay may seem to be befalling our present continents, we may be sure that there are new continents always preparing at the bottom of the sea, to serve the purposes and administer to the wants of future generations; so that if the gold of our Arabia be lost for a time, and Birmingham should come to be distressed for coals, or through a deficiency of the precious metals, for gilding and plating, before long, new Arabias and new Birminghams will be raised above the waters of the sea, with all necessary accompaniments it may be presumed of a fresh supply of coals, gold, and silver; that is, if nature be as much bound to repair the de-

the mineral regions below granite; not likely therefore to be renewable very easily or quietly, or exactly when a fresh supply may be wanted. Perhaps, however, if former continents sunk at the Deluge, and the bed of the sea were elevated, the abundance of minerals on or near the surface of the new continents, might have come from below, as the Huttonians think.

structive operation of *arts* and *manufactures*, as of her own instruments of waste and decay. For the latter may be found to be slower causes than the former, and if they cannot be made to keep pace with each other, all the mines and metallic veins of the present continents, may be exhausted, before all the rocks and mountains have been sufficiently reduced to give place to the new sub-marine continents. It seems, I say, as if such a thing might happen, if the prevailing system of decays and renovations be correct. A gentleman who writes upon the discoveries of modern geologists, in “Fraser’s Magazine,” observes that “human wants in all civilized states increase, and *animals* decrease in the same ratio.” Now if this referred only to lions, bears, tigers, hyænas, &c., it would be all very desirable, but the instances he gives, amount to absolute losses; for the demand for *furs* he tells us, has thinned the otters, the martins and the polecats. The haunts of the mallard, the snipe, the red-shank, the bittern, the lapwing, and the curlew, have been drained; the egret and the crane are only occasional visitants of Scotland; and the bustards of Wiltshire and Dorsetshire are no longer visible. This is all very true; and if the crumbling of our continents does not go on fast enough, some of our posterity must expect to live under great deprivations. *Furs* have been mentioned as likely to be lost, to fence against the cold in northern climates, without a fresh supply of polecats and otters; but what would be a very bad hearing for future epicures, nothing seems more likely to fail, than a proper supply of venison. “The stag, the fallow deer, and the roe *must* have been extinct,” we are told, before this, “but for private pastures.” Being very anxious, however, to do no injustice to

any writer upon such subjects, I shall copy this gentleman's own view of the situation of things. "The geological monuments of *former* eras tend to afford us some insight into the *future* destinies of the inhabitants of the earth; and in the contemplation of these we find that an apparent confusion and endless variety, are, in reality, the effects of a system of things perfectly uniform, and obedient to fixed and permanent laws, of which nature is the agent, and the Deity the omnipotent director and first great cause, operating upon our planet—a small individual globe amongst myriads of others which constitute the mechanism of the universe." This is all very well, if we had as human beings nothing to do with the *beginnings* and *endings* of *particular* systems; our own of course for one.

Those who have been taught to look to beginnings and endings, such as the Scriptures, in no obscure terms, give intimation of, may be disposed to think from the accounts above, that the surface of the earth was designed to be so exclusively subservient to the uses of man; that as through the history of the invention of arts and sciences, we may very regularly arrive at a proper beginning of things, not very remote, so as our continents gradually wear out, we may prognosticate the approach of some determinate end; determinate that is as a consummation of human concerns always to be expected, though *not* determinate in point of *time*; on the contrary, likely to steal upon us imperceptibly, "as a thief in the night," 1 Thess. v. 2, or more awfully, with the "suddenness of lightning," Matthew xxiv. 27.

It is better to know this, than to run any risk of being misled, by a reliance on "countless ages," past or to come, and only guessed at, as the results of certain discoveries of organic remains, in the strata of

the globe—discoveries indeed indisputable as far as they go, that is, as far as comparative anatomy can enable us, from a few bones, and due attention to the characters and habits of different species, to infer, the complete existence of animals extinct; but may there not be, I ask it with due submission, an error in the computation of time? The existence of our race can be traced back, at the lowest calculation, nearly 6,000 years, and it may be more than 7,000; of which last number, according to Theophilus Antiochenus, cited in the second part of this work, 2,242 years must have elapsed before the Deluge, in which time surely the sea must have been receiving large deposits, and “furnishing receptacles for the remains of marine animals and plants inhabiting the ocean above them, as well as for similar spoils of the land washed down into its bosom”—*Herschel*. Two thousand two hundred and forty years are certainly nothing to compare with countless ages; but if we are inhabiting the bed of the ante-diluvian sea, many things that have been brought to light, one would think, might have been deposited there, in the short course comparatively, of but two and twenty centuries. We have abundant proofs that many *unaccountable* things have taken place, as well upon the surface of the earth, as below the waters of the sea; and the principal question is, *must it* have required *countless ages* to accomplish the changes and revolutions supposed to be indicated by the fossils alluded to? *must* we be compelled to concede to the force of such *suppositions*, all that we may have previously learned from other sources, of the history of the earth and of man? for it must be recollected, that if a succession of countless ages be wanted, to explain the phenomena in question, no discovery the geologists have yet made can be more wonderful than the fact

itself, namely, that such a time should have been suffered to pass, without any display or manifestation of the *moral* attributes of the Deity. That he should have infused the “breath of life” into such a multitude of inferior animals, and during such a lapse of time, not created so much as one “living soul,” in *his own image*, as a delegated ruler over the inferior creation¹.

How very much more sublime, how very much more consistent with the brightest attributes of God, is the account in Genesis, “And God said, Let us make MAN in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth on the earth. So God created man in his own image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, be fruitful and multiply, and replenish the earth, and subdue it, and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth. And God said, Behold, I have given you every herb bearing seed which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed: to you it shall be for meat. And to every

¹ The Edinburgh Reviewer of Whewell's Bridgewater Treatise observes, “What a conceit of naturalism is it to suppose, that it was into a mite or moving jelly, that God first breathed the breath of life;” but this has reference to Meckel's remarks on the *Infusoria*, which he judged to be the first-born of animals, *Protozoa*, as he therefore called them; but the “breath of life,” and a “living soul” are very different things, and though there is much in the sentiment of the reviewer to approve and admire, we are willing to believe that life *commenced* in the lowest order of created beings, as Moses has described.

beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so. And God saw every thing that he had made, and behold it was very good. And the evening and the morning were the sixth day."

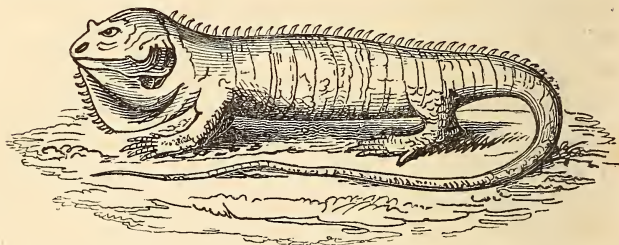
Now there is in the above account a certain congruity and fitness, which must I think *naturally* incline us to acquiesce in the truth of it. The *dominion* of man "over every living thing that moveth upon the earth," whenever the opportunity for exercising such dominion exists, is so constantly exhibited before our eyes, that it is impossible to doubt, that it is among the laws of the Creator that it should be so; and the existence of such living things moving upon the earth for a succession of ages, in *no* instance subject to such dominion, presents to the mind, so strange a condition of this terraqueous globe, as almost to exceed credibility. It was one of the points Buffon could not give up to *Leibnitz*. He objected strongly to the notion in the *Protogæa*, that marine animals, notwithstanding the shells found in our strata, were created *long prior* to man, and terrestrial animals; "independent of Scripture," he says, "is it not *reasonable* to think that the origin of all kinds of animals and vegetables is equally ancient?" He attributes the magnitude of fossil plants and animals, the existence of *giants*, and of many species of animals, in *northern* climates, and finally the extinction of many species, to the greater heat of the planet originally. The prayer at the beginning of the ninth chapter of the Book of Wisdom, expresses a belief in the fact that man was placed in the world at the very beginning of the present order of things, as a moral ruler over the

subordinate parts of the creation. "O God of my fathers, and Lord of mercy, who hast made all things with thy word¹, and ordained man through thy wisdom, that he should have dominion over the creatures which thou hast made, and order the world according to equity, and righteousness, and execute judgment with an upright heart."

It is certainly true that the inferior races of animals might exist and occupy the earth, independent of man; but considering the present visible connection between them, and the marked utility of almost all that come in the way of man, it is not easy to suppose that whole races of the former should have been *created, and actually become extinct*, before man appeared amongst them. "The wild goats of the rock," "the wild ass," and the wild "unicorn;" "the eagle that makes her nest on high;" "Behemoth," and "Leviathan," might long escape subjection, though man were on the earth; but even the Almighty himself, as represented in the passages of Scripture alluded to, contemplates the co-existence of man, in the midst of such descriptions of the *freedom, power and magnitude* of certain of the inferior animals, as never can be surpassed in grandeur and sublimity. Thus the "wild ass" is *wild*, because he "scorneth the *multitude of the city*;" the "unicorn," is represented as difficult to tame and render useful, but his adaptation to agricultural services, if once tamed, and brought "to abide the crib," is sufficient proof, that though since judged to be an extinct animal, he was contemplated as existing with man. The "ostrich," almost deprived of the instinctive wisdom common to other animals, is described as lifting herself up, not only against the

¹ Calmet reads, "par son Verbe, par son *Fils*."

horse but his "*rider*;" and as to the horse himself, man is mixed up with all his glory. The following is too remarkable to be passed over. "Behold now *Behemoth* which I made with thee." It may express no more than that he was to be found in the parts where Job dwelt; but it is scarcely possible that any of the extinct tribes should have exceeded in bulk or strength, or even ugliness, *Behemoth* and *Leviathan*¹. If indeed the latter was the *crocodile* and not the whale, it may be the *megalosaur* of geologists, which Cuvier says, speaking of Dr. Buckland's discovery, "was a *lizard* of the size of a *whale*." I know not indeed whether it may not have been the *iguanodon* itself, which is judged also to have been of the *crocodile* or *lizard* tribe, nine feet high and seventy feet long; and of no very agreeable form, bating its magnitude, as the sketch below may prove.



However, according to the Book of Job, even the *Leviathan*, was evidently a contemporary of man²; but of what *use* lizards as big as whales, or such creatures as *Iguanodons*, could be, I am not prepared to state.

In what I am saying, I am not pretending to ascertain the age of the globe itself, as a part of the

¹ See before from the Book of Enoch, part iv.

² The Book of Enoch, as I have shown, makes it a contemporary of "the *giants*" that "were in the earth," in the days of Enoch himself; suitable companions.

solar system; I am not pretending to fix the time, when, if it were projected from the sun, that projection took place; nor in what state and condition it was projected; I am only endeavouring to find out, whether man's first occupation of the *surface* of the planet, and his dominion over the other living things that move upon the earth, are facts that have been historically recorded, or whether they were propounded by the author of the Pentateuch so much at random, as to be no better, in regard to human concerns, than the baseless fabric of a vision, though referred to by our Saviour, St. Paul, and St. Peter, as constituting the very foundations of Christianity.

I am not pretending to assert, that the planet was, from its first creation, unoccupied, till our own peculiar race was brought upon the stage; but looking upon the *surface* of the earth, as a scene of things betokening great physical revolutions and catastrophes, I cannot but feel disposed to think, that the period is ascertainable, at which the *preparation*, if not the actual creation, of the terraqueous portion of the planet, for the *uses of man*, took place¹, and though

¹ Geologists do not deny the fact of *preparation* in a general point of view, but still with very degrading representations of the actual introduction of man. Thus, one gentleman admits that the first pair of human creatures, was introduced, "between the tropics, in a climate of perpetual summer, *suited to their nakedness*; in accordance with *our* general principle of *creation*, fruits, herbs, roots, and animals abound in this fertile region, so well adapted to man's *nature* and *exigencies*. The soil brought forth without tillage and animals were not scared by the intrusion of colonists at the period of man's first appearance." But alas! all this preparation was only for two *arrant barbarians*; for the very next passage is, "man's advancement from a state of *perfect barbarism* to his subsequent social condition *must* have been *gradual*." I can scarcely fancy that the world could ever have produced, even in the compass of thousands of years, myriads of such fools as myself, to

not at that period, exempted from future catastrophes and changes (such for instance as the deluge), yet destined to continue the abode of man, under certain circumstances, till some future general breaking up again of the superficial parts, or of the whole orb, shall terminate *man's* occupation, and deliver him back, as it were, into the hand of God, as a steward called to give account of the trust reposed in him (for a time), and to be rewarded or punished accordingly, in other regions of the universe.

It is upon such general accounts as these, that I am anxious to prevent our faith in the Genesis of Moses being *disturbed*, by theories and conceits, the actual truth of which, if they *should* in reality turn out to be *more* than mere theories and conceits, it seems impossible to establish, because the real *cause* of all we see, observe, and examine (to use the words of one, who above most others, appears to have not only seen, but to have observed and examined too), will “still remain behind, irremovable; the necessary, the Eternal, THE CAUSE,” “which,” as we read in Job, “doeth great things and *unsearchable*; marvellous things without number; who giveth rain upon the earth, and sendeth waters upon the fields,” which instance of God’s *unsearchable* doings, is rather remarkable, as referring to a branch of natural philosophy (*meteorology*), confessed to this very day to be replete with wonders, almost surpassing, if not entirely

think and *believe* it possible, that “God,” as the most ancient of ancient writers has told us, “created man in *his own image*, in the image of God created he him; male and female created he them,” yet so it is, myriads and myriads for what I know, have actually believed the passage above, not only to be true, but to convey to the mind of man, a truth of great comfort, great grandeur, and great sublimity.

so, the utmost reach even of modern science¹; and yet what can be more common, as objects of observation and attention, than the rain which God sendeth upon the earth, and the water with which he irrigates our fields?

If it should be thought, that since the great advancement of science, and examinations of the earth in particular, which have recently taken place, there must be much of habit, in still receiving with a degree of unqualified reverence and acquiescence, such portions of the Book of Genesis as describe what has been commonly called the *creation*, I am not disposed to deny it, if the whole amount of the impression be taken into account. In regard to the actual *creation* of things, I conceive the very first verse of the first chapter speaks *indefinitely*² of the heaven and the earth, and that what follows, refers to a period, when all that we see around us, may be said to have had *a beginning* in the way of order, arrangement, and accommodation, for the uses of *man*. I am not cosmogonist or geologist enough to pretend to bring all natural appearances to the test of Scripture; but I am not willing to let Scripture be brought to the test of modern philosophy, at the hazard of having Moses accounted a mere mythologist, as in the case of the Jews and Christians of Prussia, of whom I have made sufficient mention in a former part of my work. Jews must be left to

¹ "The other branches of knowledge which belong to natural philosophy, as chemistry and *meteorology*, are as yet imperfect, and perhaps infant sciences."—*Whewell*.

² Whiston is judged to be one of the first who ventured to propose that the text of Genesis should be interpreted differently from its ordinary acceptation, so that the doctrine of the earth having existed long previous to the creation of man, might no longer be reputed unorthodox.—*Lyell* i. 39.

act as they please with their own Scriptures, being without such confirmation of the truth of the Mosaic history, as all who call themselves Christians, ought to feel, and be prepared to acknowledge.

The history of the *first* Adam, as is well known, began with a *temptation* to sin on the part of the *devil*. He, through Eve, yielded to the temptation, disobeyed the first probationary injunction of God, and fell.

The history of the *second* Adam begins likewise with a temptation on the part of the devil, which the *second* Adam withstood and resisted, thereby defying in our nature, and in the same nature ultimately overcoming, both sin and Satan; and it is certainly remarkably to our purpose to observe, that our Saviour, in the case of his own temptation, in every instance of disdain and defiance, refers to the “written” word of God; written, that is, in the *Pentateuch*, the work of *Moses*, long before any thing like mythology was heard of; though mythology is older than the earliest *profane history*, properly so called. I need not go at large into the subject of our Saviour’s numerous and express references to the *Pentateuch*, they may be easily found by any body who will be at the pains to run his eye down the margin of our four Gospels; and it may be well to do so, before he abandons the least particle of his faith, in the general credibility of an author, quite as much connected, I have no hesitation in saying, with *Christianity*, as with *Judaism*. It has been accurately shown¹, that our Saviour and his apostles have cited *verbatim*, as many as twenty-seven passages from the

¹ By Rivet, see Bishop Gray’s Key to the Old Testament.

Book of *Genesis* alone, and according to the *sense* thirty-eight.

The historians of the old and new creation, so to speak, stand so far apart in the book of God, that too much care cannot be taken, to keep up a strong sense and impression of their close and direct connection with each other; for no building can stand, if the foundation be broken up; and we have ample proof, in the suffrage of our Saviour and his apostles just referred to, that the foundation of Christianity is to be sought for in the writings of Moses. Those writings may *now* be said to have been exposed to *two* sets of objections, very different in their characters, but both, in their tendency and effects, *chronological*. The history of *man* has had to encounter all the extravagant computations of nations, unconnected with, and adverse to, the pretensions of the *Jews*; and *now* the history of the *earth*, has to surmount all the difficulties arising from computations of still larger amount, approaching to an eternity, if not actually arriving at such a conclusion ¹.

I have considered in the first and second part of this work, the former set of objections, but something may still be added. It is of no use to refer to works entirely out of print, otherwise in the notes to my Bampton Lectures, much more might be found upon the subject, than I have room for here; having, however, shown that a method had been discovered, by a writer not particularly friendly to the cause of

¹ Mr. Mantell uses the word eternity, but at all events undertakes to assure us, "that the earth has teemed with countless forms of animal and vegetable existence, myriads of ages before the creation of the human race." I cannot help asking, "*Cui bono?*" Mr. Mantell's own book, I must say, though extremely curious, and properly scientific, has not convinced me that his conclusions are just.

revelation, of reconciling the Indian ages, two of them at the least, amounting together, to one million two hundred and ninety-six thousand years, with the Mosaic computation, and as perhaps the method of unravelling such chronological conundrums is not very generally known, I shall endeavour to make the case a little more intelligible.

No circumstance seems to be now more settled and determined, than that the ancients had *years* of all lengths and descriptions; of two weeks or fifteen days, half a month; of one or two months; six months, &c., thirty or sixty days, &c.; all these were known in India, particularly that of the fortnight, or dark and bright halves of the moon. We are told, indeed, that in India, both DAY and YEAR, mean no more than the *Saros* of the Chaldeans, viz. a *Revolution*¹.

Whether the ancients meant to puzzle or deceive those who were to come after them, by concealing the exact measurement of the *years* they wrote of, or adopted, certain it is, that in most instances, this was the case; they left it to their successors to find this out as they could. At last however a clue was found, and it seems to have operated like a master-key to open a great abundance of mysteries. It must be obvious, that years of *days* or *months*, will admit of being reduced to *solar* years, and that a similar plan may be pursued with regard to years of any dimensions less than the solar year.

The following very simple instance may help to show to how great a nicety the method alluded to may be made to work.

Two ancient authors, *Callisthenes* and *Epigenes*,

¹ The President Goguet, thinks the *Saros* ought to be confined to a *lunar* revolution from the Chaldean term *Sar*, *lunaris*.

are known to have given different accounts of the Chaldean observations, the latter making them amount to the amazing sum of seven hundred and twenty thousand years, the former to only nineteen hundred and three. Now 720,000 *days* make as nearly as can be 1971 *years*; and as Epigenes is held to have been sixty eight years posterior to Callisthenes, the accounts may fairly enough be said to agree exactly.

Every body has heard of Herodotus:—when he was collecting materials for his history in Egypt, he was told by the priests there, that from the time of their first king, or priest of Vulcan, till the time of *Sethos*¹, (in whose time *Sennacherib* attempted the conquest of Egypt), there had been passed 341 generations, *as many* kings and high priests, and 11,340 years, reckoning three generations to make up a century; in other words, that there had been, in that time, *three hundred and forty-one kings*, and *three hundred and forty-one* chief priests, in *three hundred and forty-one* generations, during a space of 11,340 years. (Such a concurrence in point of numbers as the President Goguet long ago observed, must, at least, have looked like imposition.) Whether it was intended as a trick upon Herodotus, and his credulous countrymen, does not appear, but that they might have practised such a deception, without any actual impeachment of their veracity appears from this, that it may be made to agree with the real truth of things. For, according to this account, 100 such years make 3000 days, and a generation 1000; so many days the kings or priests of Vulcan may be allowed to reign; so 340 gene-

¹ Or Sethon.

rations, of 1000 days apiece, make up 340,000 days; to which, if we add the 200 days which Sethon is said to have reigned at the time of Sennacherib's invasion, we have 340,200 days, which make up, of *years* of 30 *days apiece*¹, 11,340, the very number assigned by Herodotus. Capellus thinks the epocha whence these years are to be reckoned, is from A.M. 2350, whence Mephres began to reign in Egypt, from which if we number these 340,200 days, or 11,340 *monthly* years, which make of Julian years 931, and 152 days, the number falls A.M. 3282², about which time Sennacherib in all probability did actually invade Egypt.

The accounts given us by *Diodorus Siculus* of Egyptian antiquities, admit of a like solution, and indeed much more might be adduced in proof of the practicability of thus reconciling ancient and modern computations, were not the above instances, as I trust, sufficient, without loading my pages with figures. Knowing the extravagancies with which the world had been amused, from the times of Herodotus, or earlier; and in how many instances the fallacy of such claims to antiquity, on the part of many nations, had been detected, it is certainly surprising that so much attention should have been paid to the Hindu Chronology, as is known to have been the case. Mr. Mill in his *History of British India*, makes the same remark, and with reason, attributing it entirely to the *love of the marvellous*; and sure enough there

¹ Plutarch speaking of the Egyptians' great pretensions to antiquity, has expressly observed, that they reckoned an infinite number of years in their accounts, because they reckoned their *months* for *years*.

² B.C. 722.—Sethon defeated Sennacherib, B. C. 720.—Bell's Chronology.

never were people more likely to gratify such a passion than the Hindus, or eastern nations generally. The Burmans, for instance, believe that the lives of the first inhabitants of their country lasted one *assenchii*, a period of time of which they give the following illustration. “ If for three years it should rain incessantly over the whole surface of this earth, which is 1,203,400 junza in diameter, the number of drops of rain falling in such a space of time, although far exceeding human conception, would only equal the number of years contained in *one assenchii*.”

The Hindus themselves estimate the circumference of the globe to be 2,456,000,000 British miles, and have invented for their god Brahma, a year composed of the multiplication of two thousand ages (each of above four millions of our years) by 360.

Here then we have calculations fully answerable to the myriads and myriads of years on which geologists insist, as far as the *earth* is concerned; but we look in vain for any history conformable to such reckonings. On the contrary, the very ages that they call *historical*, have been shown, by Sir William Jones, to be altogether artificial.

“ The duration of *historical* ages,” says he, “ must needs be very unequal and disproportionate, while that of the Indian yugs (or ages) is disposed so regularly and artificially, that it cannot be admitted as natural and probable. Men do not become reprobate in a geometrical progression, or at the termination of regular periods; yet so well proportioned are the yugs, that even the length of human life is diminished as they advance from an hundred thousand years in a subdecuple ratio; and as the number of principal *avatars* in each decreases arithmetically from four, so

the number of years in each decreases geometrically, and all together constitute the extraordinary sum of four millions three hundred and twenty thousand years; which aggregate multiplied by seventy-one, is the period in which every Menu is believed to preside over the world. The comprehensive mind of an Indian chronologist has no limits; the reigns of fourteen Menus are only a single day of Bramha, fifty of which have elapsed, according to the Hindus, from the time of the creation." Sir William adds, "possibly this is only an astronomical riddle¹;" having in another place taken pains to reduce to arithmetical numeration one of the Indian periods, that of *rudra*, Sir William found it to amount to the enormous sum of "two quadrillions, five hundred and ninety-two thousand millions of lunar years!"

We read of kings in India who reigned 23,000 years, nay even 29,793 years; but it is granted that except the *Puranas*, which are full of unconnected and incredible fictions, the Hindus are "perfectly destitute of historical records²;" even of the *Puranas* Captain Wilford has observed, that if a *key* should be in existence, it is more than probable that the *wards* would be found too intricate to answer any useful purpose; and that, in short, "their systems of geography, chronology, and history, are all equally monstrous and absurd."

But it was not a mere love of the marvellous, "*le goût du merveilleux*," as M. Bailly calls it, which procured so much attention to be paid to the Indian *yugs* or *ages*, but a persuasion on the part of certain very

¹ See the paper on the Gods of Greece, Italy, and India.—*Asiatic Researches*, vol. i.

² Mill's *British India*.

eminent lovers of science, that they were connected in a most extraordinary manner with the science of astronomy. It fell indeed to the lot of so celebrated a man as Professor Playfair, to give a false celebrity to the Hindu astronomical tables, in a dissertation read before the Royal Society at Edinburgh, in 1788:—he announced the following conclusions. “On the grounds which have now been explained the following general conclusions appear to be established. The observations on which the astronomy of India is founded, were made more than 3,000 years before the Christian era,” (consequently more than 650 years before the Deluge, according to the Hebrew chronology), “and in particular the places of the sun and moon at the Kali yug,” (the age of misfortune, 3102 B. C.) “were determined by *actual observation*.” Other conclusions of the same learned person would carry back the time of these observations to 4,300 years before the Christian era.

But these conclusions were afterwards proved to be altogether fallacious by the two celebrated French philosophers, *Laplace* and *Delambre*, who, giving more credit to M. Bentley’s conclusion, that they had only been calculated backward, and were therefore comparatively modern¹, may be said to have totally overruled the decisions of the Scottish professor, and done much to prove, as Dr. Ure has observed, that the opinion entertained by the Hindus of their great antiquity, is “founded in vanity, ignorance, and credulity.” Cuvier himself, speaking of *Bailly’s* system, says, “The whole of this system, invented with so much labour, falls to the ground of

¹ About 1281 of the Christian era.

itself, now that it is proved that this epoch has been adopted but of late, from calculations made backwards, and even false in their results ¹.” Though M. Bailly did certainly rely too much on the proficiency of the Hindus in the science of astronomy, we are still indebted to him for his great attention to the artificial chronology of ancient times, and the very ingenious manner in which he was able to detect a very extraordinary agreement between not only all the ancient accounts, Phœnician, Egyptian, Chaldean, and Hebrew, but with the more recently discovered annals of China and India, thereby supplying us with ample reasons to conclude that (to use his own words) they were all derived from one source; in fact, it seems almost impossible to resist the conclusion that the traditions concerning the true chronology of the world, ante-diluvian and post-diluvian, were the foundation of all the extravagant computations of the ancients; that they have preserved what is true ², in forms more artificial than could possibly be consistent with any real history whatsoever. That in most, if not in all instances, they have carried them back beyond the

¹ Theory of the Earth, with Professor Jameson's Illustrations, 5th edit. 1827. To this edition, as well as the fourth, the learned editor was able to add two learned discussions by *Cuvier*, on the newness of the present continents, as confirmed by the history of nations; and on the proofs regarding the antiquity of nations alleged to be contained in their astronomical and other monuments.

² “Is it possible,” says M. Cuvier, “that mere accident should afford so striking a result as to unite the traditional origin of the Assyrian, Indian, and Chinese monarchies to the same epoch of about 4,000 years from the present time?—could the ideas of nations, who possessed almost no mutual affinities,—whose language, religion, and laws, had nothing in common,—could they conspire to one point,—did not truth bring them together?” The remark will apply to an abundance of similar cases.

Mosaic era of the creation, through what M. Bailly calls, "*le goût du merveilleux*," or perhaps in the way of rivalry, of which they have all been accused; that many are entirely astronomical, and as Mr. Bryant long ago very judiciously observed of Manetho's famous cycle of 36,525 years¹, belong rather to an ephemeris, than to true history.

We may now, then, reasonably conclude, that the Bible history and chronology stand perfectly secure from all future disturbance from other histories, and other computations of time. History, indeed, there is none to be found; the very extravagant computations of ancient nations have in nothing so much failed as in the total absence of all support, from any credible records of human transactions², while the computations themselves have been so sifted, and examined, as to turn out to be little better than chronological or astronomical riddles. The solution of which, though not very pleasant reading, from the incumbrance of figures, exhibits such a series of unexpected coincidences, and curious combinations of numbers, as not entirely to be passed over, in a work particularly designed to establish the exclusive credibility of the sacred records, in point both of history and chronology, and on the authority more immediately of Moses and St. Paul³. I will be as brief as possible.

Four hundred and thirty-two thousand years ap-

¹ Jamblichus tells us, the writings of Hermas amounted to this very number of 36,525 books.

² This is admirably shown by the President Goguet, in his well known work on the origin of arts and sciences; where he justly observes, that the absurd pretensions to an immense antiquity, founded on fabulous chronicles, were, in the case of the Egyptians particularly, almost turned into ridicule by Cicero, Diodorus, Aristotle, Plutarch, and Varro.

³ See Parts I. and II.

pears to be a particular computation of ancient times. I have spoken of the Hindu *ages* ; eighteen in all, but only the four last judged to be worthy of any attention. Four hundred and thirty-two thousand years is the amount of the last or current age. Now in the *Chinese* annals the kings of heaven and the kings of earth are said to have reigned exactly 432,000 years ; which we have shown to be the amount of the fourth or last Indian age ; but this number of years, multiplied by seven (the days in a week), produce 3,034,000 days, which is exactly the number of days in the first two Indian ages, and which M. Bailly found to agree with the two first Chinese races of Tien-hoang, and Ti-hoang, and the *Dives* of the *Persians* ; while the third Chinese race of Gin-hoang agrees with the *third* Hindu age, and with the *Peris* of the *Persians*. Lastly, the 120 *Chaldean Sari* of Berosus, (who preceded St. Paul by nearly three centuries), at 3,600 years to a Saros, amount also to 432,000 years, thus agreeing both with the Chinese and Hindus, but apparently in a most arbitrary manner. In Dr. Hales's Chronology, however, we have a key given us to unlock these numerical mysteries. The period of 432,000 years, he shows to have been produced by the multiplication of the two factors, 18 and 24,000 into each other, of which 18 was the *Chaldean Saros*, and 24,000 the *Annus Magnus*, or grand revolution of the orb of the fixed stars, at fifty-four seconds a year.

PART VI.

I HOPE it will have appeared, from the foregoing parts of this work, that my chief motive for writing it has been, not to decry science as science, much less to check the course of experimental philosophy, justly so called, and for the progress and promotion of which, I could feel as anxious as Bacon himself, but to put *unphilosophical* readers on their guard against any disturbance of their faith in the Holy Scriptures. Certain recent discoveries of organized bodies in our strata, having been supposed to indicate not only a succession of terrestrial revolutions, during an immeasurable amount of time ¹, but the absolute creation and existence of numberless living beings, judged to have occupied the earth and waters, and even to have become extinct, before our own race was brought upon the stage; thereby manifestly *appearing* to establish, as a discovery of modern science, the strong fact, that, as far as the *earth* is concerned, the Hebrew records are likely to mislead us; if they have not indeed already misled or confounded many heedless persons, to the great impediment and hindrance of the favourite science of *geology* ².

I have therefore endeavoured in the first place to give an account of the history of *man* distinct from

¹ See Sir Charles Bell's Bridgewater Treatise, p. 106.

² Lyell.

the history of the earth; not exactly in compliance with the *demands* of geologists, but to show what can be done without them; to show in what estimation Moses was held, as a *sacred* historian, by our SAVIOUR and his holy apostles, who did not appear upon the earth, in any dark, illiterate age, but at a period particularly unfavourable for any attempts to impose upon the world; who challenged inquiry, excited inquiry, and had their credentials admitted, not by friends only, but by professed enemies and opponents; enemies well-armed in a worldly point of view, and opponents as subtle and acute, and what is more, as *inquisitive*, as the case could require.

I have endeavoured to show, not through any contempt or denial of what is called natural religion, or of the reasoning powers of man, when applied to suitable objects, that there is a darkness at the very best hanging over us, which nothing less than the light of revelation could disperse; a light from heaven connecting us with the universe and the Author of the universe¹; and necessary, indispensably necessary, to “guide us into all truth;” that is,

¹ If astronomy has enlarged our ideas of the universe, it has done nothing to disappoint our hopes, check our reasonable aspirings, or lessen our importance.

“ Know’st thou th’ importance of a SOUL IMMORTAL ?
Behold this midnight glory ; WORLDS on WORLDS !
Amazing pomp ! redouble this amaze ;
Ten thousand add ; add twice ten thousand more ;
Then weigh the whole : one SOUL outweighs them all.

The soul’s high price is the creation’s key,
Unlocks its mysteries, and naked lays
The genuine cause of every deed divine :
This is the chain of *ages*, which maintains
Their obvious correspondence, and unites
Most distant periods in ONE bless’d design.”

all truth that can be strictly essential to us, as apparently the beings of a day, yet by adoption and grace, through Christ, heirs of *immortality*.

I have quoted *Pascal*¹ as an authority for any distrust of the religion of nature, not only because he was a man of most extraordinary reasoning powers, but because he appears to me to have most correctly drawn the line between natural religion and revelation, in the following passage, which I shall beg leave to repeat.

“Nature offers no consideration but what is the subject of *doubt* and *disquiet*. Could I *nowhere* discern the least token of divinity, I would resolve not to believe at all; could I in *every thing* trace the image of a Creator, I would rest myself upon a sure and settled belief; but while I see *too much to deny*, and *too little* to give me any *certain* confidence, my condition renders me an object of pity; and I have a thousand times wished that if nature have indeed a divine Author and *supporter*, she would present us with the lively draught and uncontested character of His being; but that, if the marks she *does* bear about her are *fallacious*, she would entirely conceal Him from our view, that she would either say ALL, or say nothing, so as to determine my judgment one way or the other.”

Here then is no further distrust of natural religion, than that nature does not tell *all*; but, that the *Author of nature* had, by *revelation*, told ALL, to his entire relief from that pitiable condition which he contem-

¹ Pascal has a thought so similar to the above passage from Young, that I cannot forbear copying it. “Tous les *corps*, le firmament, les étoiles, la terre, et les royaumes, ne valent pas le moindre des *esprits*, car il connoit tout cela, et soi-même, et le corps rien.”

plates as the result of any doubt or disquiet upon such important subjects, no man more thoroughly believed, no man more deeply felt, than Pascal himself, as his works show.—A shorter distinction still between natural and revealed religion, and fully implying the *need* we have of the latter, is to be found in the works of Bacon. “It is written,” says that great man, “*Cœli enarrant gloriam Dei*, the heavens declare the *glory* of God; but it is *not* written, *Cœli enarrant voluntatem Dei*. His *will* and pleasure with regard to man must be sought for elsewhere; *de illis pronuntiatur ad legem et testimonia*.”

“I gratefully receive and rejoice,” *Locke* was used to say, “in the light of revelation, which has set me at rest in many things, the manner whereof *my poor reason* could by no means make out to me.”

“Seest thou a man wise in his own conceit: there is more hope of a fool than of him,” says *Solomon*. It would be endless to attempt to enumerate, the great men, ancient and modern, confessedly *unwise* in their *own conceit*, while in want of the light of revelation.

I have given the *history* of the Bible, in order to show, not only that it is, without exception, the oldest book extant, but that it contains exactly what the oldest book extant might be expected to contain, the history of the beginning of things, and the origin of man, not as an organic development; not as a rude savage thrown loosely upon the earth to find his own way without guidance or direction, but as created in the image of God himself, endowed in a wonderful manner with the gifts of reason and intelligence, and still more wonderfully entrusted with a freedom of will, to render him a moral being of a higher order than

the rest of the animal creation, and to fit him for the rewards of virtue, in case of a willing obedience.

I have shown, that under the above circumstances, the progenitor of our race, *Adam*, fell from his original estate by disobedience to the law given him, and that to remedy the losses incurred, and abrogate the threatened penalties, a new creation and a second *Adam*, were ordained to take place and to appear, in fulfilment of the counsels of the Almighty; the history of which events, the *uncontradicted* history, constitutes of course not only a part of true religion, but the most essential part, compared with any thing that nature alone, or the reason of man alone, discover to us, or could supply. This then is, I think, a just picture of the history of man, as known to us *theologically*; I have further endeavoured to show, how he is known to us *geologically*.

But here, I apprehend, I shall scarcely escape derision, perhaps worse; derision I can bear, for I have long ceased to be a geologist myself, and should never have ventured to meddle again with the subject, but to prevent false impressions, as injurious to the reputation of well-disposed geologists themselves, as to the persons whom they may unintentionally perplex by their very ingenious, but altogether *scientific* writings. There is an old school maxim, that may serve to express or explain what I feel upon the subject. "*Quicquid recipitur recipitur ad modum recipientis.*" The books of modern geologists may, and very probably do, contain a great deal of what they themselves know to be sound philosophy, curious discovery, and absolute fact; but any unguarded expressions in the enunciation of these particulars, considering the multiplicity of readers they

will attract (for their books are to be found now in most of our reading societies in town and country), may have the effect of disturbing principles of more value than all the philosophical discoveries that can be made. I have myself been asked questions that would prove what I say.

It is not, therefore, in any contempt or defiance of the propounders of this new knowledge, that I send this little book into the world, but in compassion to such *recipients* of their very curious information, as may stand in need of caution and advice.

I am surprised to think that generally speaking, the mere attempt to uphold the credit of Moses, should have been judged to deserve such hard names and words as are to be found in certain books and journals which have fallen in my way; religious animosity, priestly pride, and zeal, bigotry of the worst kind (which however, having been pronounced to be in *these days*, utterly *powerless*, must for the same reason be harmless), despicable ignorance, a decrying of reason, because they are afraid of it, a disparagement of intellect, through a conscious want of it; lastly, and perhaps above all, an absolute enmity to, and spite against science.

I know that I am laying myself open to *such* charges and more, but I cannot say that the dread of them is so great as to prevent my speaking my mind.

I feel no enmity to science, no jealousy of scientific researches cautiously conducted. I have nothing to say against a *march of intellect*, as long as it does not proceed in too quick time¹, to the alarm and over-

¹ This is the principal danger. I know a science, of about the same age as geology, in which it appears to be too much the fashion to form

setting of more quiet observers astounded at the rapidity of its course. It deserves besides to be considered, that there are some intellects so much slower and duller than others, as to be quite incapable of keeping up with the latter, and in their too great haste to do so, though their leaders may be any thing but blind, they themselves may fall into a ditch or two, as much to their individual damage as though their very leaders *were*, strictly speaking, stone blind.

It is this that has induced me to look so narrowly to the *language* of geologists, as calculated to produce false impressions upon some minds, though certainly not intended to do so. I shall cite a passage to this effect from an author of eminence, whose publication was sent to me after much of this work was printed.

“If we look at the actual case of the writings of *Moses*, it is surely in *every way*, the *most probable supposition* that *tradition* had preserved some *legendary* memorials of primæval events, and that the origin of the world had been recorded in a *poetical cosmogony*.”

Before the credit of *Moses* be suffered to fall under the weight of these “probable suppositions,” I shall hope to be excused observing, what odd traditionary

hasty conclusions, and even *act upon them*, at no small risk. It is a science certainly of infinite importance in a *political* point of view, but of the too great rapidity of its march, I think I have proofs before my eyes, not easily to be disputed; I allude to the number of commissions sent abroad *at this time* to make *inquiries*, and the very recent establishment of a Statistical Society, for the purpose of collecting *facts*, without a complete knowledge of which, such *undeniable* conclusions can never be arrived at, as the science requires; without such information in short, it can only be regarded as a system of very hazardous experiments.

and legendary memorials these must have been, that in those very remote times (to speak only of the origin of *man*) should have brought Moses so much nearer to the actual truth of things, than was the case with the historians of all other ancient nations. The French Deists, at the time of the revolution, would have it that Moses borrowed his cosmogony from *India*; but MM. Teller, Eichhorn, and other German expositors, judged him to have borrowed it from the *Chaldeans* and *Egyptians*, all of whom are now known to have ascribed such an age to the earth, and the *inhabitants of the earth*, as to be wholly and glaringly inconsistent with the Genesis of Moses. Had Moses gone *beyond* the computations of other ancient nations, and carried his *history* and *chronology* much higher than he is allowed to have done, he might with reason have been reputed at the least, as cunning as the Chaldeans, who, as Lactantius observes (speaking expressly of their chronological extravagancies), “*in quo quia se posse argui non putabant, liberum sibi crediderunt esse, mentiri,*” that is, because they judged it to be impossible for any to contradict them, they held themselves to be quite at liberty to *falsify*. Moses, therefore, must have been the most incautious, and least cunning writer in the world, to have trusted to any traditions or legendary tales that would have laid him so open to contradiction, as that part of Genesis must have done, which related to the beginning of the human race; but which happens to be confirmed by such a succession of proofs, as cannot be alleged of any other history in the compass of the globe. “How was it,” says the learned Dr. Craven, in his able discourses on the Jewish and Christian revelations,

“ that the *Jews* drew *not* water from the fountains of Chaldea and Egypt, or *rather*, whence had *they* their *clear* and *pure* waters, when *all* the *springs* around were muddy and corrupt?” “ It would be a degree of injustice to the claims of Moses, to institute any comparison between the sacred and the oriental philosophy. It cannot be easily conceived, how he could have escaped the contagion of that system, which spread itself universally over the East, and which captivated alike the Greek philosophers and the Hebrew sages; had he not written under the direction of a higher and infallible monitor.”—*Nolan*.

But perhaps it will be said, Moses might be right about man, but still as to the earth, his account must have been derived from some poetical cosmogony.

Now I believe the first *poetical cosmogony* we know of was Hesiod's, who flourished about five centuries and a half *after* Moses, and who is supposed to have borrowed *his* idea of a *chaos* from the very history in question, and it is odd enough, after what I have said concerning the chaotic and anti-chaotic systems in a former part of this work, that Hesiod made the very blunder, that my friend De Luc avoided; instead of going back to a *fiat* of the Almighty for the reduction of his chaos into order, he made a god of chaos itself, to the exclusion of the Author of the universe¹.

¹ Having just cited a passage from Dr. Nolan's Bampton Lecture of the *last* year, 1833, I cannot omit to observe, that I had no opportunity of seeing it till after all the foregoing sections of this little work were written, and in the course of being printed. It may be supposed that I should otherwise have made more references to so learned a work; especially considering, that there we find a primitive *chaos* again, with *light* as the first physical agent, in reducing it to order; there we find the Sabbath insisted on as a memorial of the *creation*, and as *then* first instituted; there we find the disappearance of stars

So far then from admitting, that it is in every way the *most probable supposition*, that Moses wrote the history of *man*, (mixed up as it is with his *Cosmogony*, properly so called,) merely on the authority of traditional legends, I must acknowledge that I am still disposed, to receive as true, the account he gives of a *chaotic confusion of things*, about the time of 'man's first appearance upon the earth; though it might only be the termination of some preceding epoch, anterior, that is, to the creation of man, and with which, of course, even if I were to grant the point, *we* could have nothing to do; not being at such times, according to geologists "denizens" of the globe itself. It cannot be dissembled that the Mosaic history, as it is *commonly received*, stands in their way, and why not therefore, submit to the *severance* on which they appear so earnestly to insist¹, and leave them to make

acknowledged to be a pretty certain indication of the probable dissolution or extinction of particular planets or systems; and of course the appearance of new stars, as indicative of new creations; and all for moral ends and purposes. There we find the natural chronometers, applied by De Luc to the proof of the Noachic Deluge, and insisted upon, as approved by Dolomieu, Cuvier, Greenough, &c. There also we even find a fair conjecture as to the existence and extinction of antediluvian *monsters*. I could not be aware that a writer so much more learned than myself, was applying his attention to precisely the same subjects, and exactly at the same time. After all, however, Dr. Nolan's work is very different from my own, being altogether learned, grave, and argumentative.

¹ I do not like to use strong words when I can possibly avoid it, but in this instance, I cannot think the word *insist* too strong. We are positively told by philosophers, and geologists, and professors of great name, that revelation and physics can *have nothing to do with each other*; then let physics take their chance; and let believers in revelation stick to revelation. If Moses may be supposed to have spoken of *physics* in his six days' creation, he has certainly spoken also of the *power* of God, which I apprehend to be *above physics*, and not amenable to the present observable laws of physics. If any man, therefore, should be disposed to believe, on the authority of Moses, that it *might*

what they please of their anterior periods, epochs, and *worlds without end*; the knowledge of believers in general *need not* certainly be carried farther than the point where the history of their *own race* begins, especially if they have no more to learn of any preceding state of the planet than geologists are able to tell us.

Perhaps some flaw in these theories may yet be discovered; for though I am the last man in the world to dispute any facts, that ought to be received at once as strictly indisputable, I am at a loss to account for the state of things, to which their conclusions lead us. I am at a loss to understand what the object can have been of delivering up this goodly planet, to the sole use of a multitude of strange animals, for a great length of time, without any contemporary beings of higher faculties¹.

The Mosaic history of creation begins with God, and relates things worthy of God; the *geological* history of things, to say the least, *seems* to begin with nature, distinct from, though not altogether exclusive of God.

I copy the following from a publication but lately

not be *altogether impossible* for *Omnipotence*, to call into existence in six days such scenes and such beings as we behold around us, where would be his great offence? I know not, and I think Longinus, if he had been asked, would have said, the ground of such belief was, the very height of sublimity, as regards the Supreme Being. There is *another change* we have been taught to look to, when the earth shall be called upon to deliver up her dead; and in which the *power* of God, will not stay for physical processes, but the change to be accomplished, though most wonderful, will take place, we are told, *εν ατομῳ, εν ριπη οφθαλμου*, "in a moment, in the twinkling of an eye!" 1 Cor. xv. 52.

¹ Unless indeed their very remains were *wanted*, as some appear to have thought, to render the earth habitable for man; an odd conceit, but one that, among a multitude of others, has had its day.

come to hand, though already referred to "The [Mosaic] narrative assigns six days, in each of which arose successively, in the order of more perfect organization, the earth and its various productions up to man, followed by a seventh day of rest and blessing. The facts which continued and laborious examination have established beyond the possibility of question, on the part of any one *competently acquainted* with the subject, are those of a long succession of periods or eras, throughout each of which the world had its perfect compliment of life in abundant variety, continuing through different stages of indefinitely long duration, successively developing new forms of vitality to supply the place of those which had become extinct, until *at length*, in the *countless revolutions of ages*, the face of the globe, and the species inhabiting it, *began* to assume something like its existing appearance, and became a suitable habitation for man." [Substance of a discourse by the Rev. Baden Powell, M.A., F.R.S., Savilian Professor of Geometry, Oxford, 1833.] As the learned author declares it to be the *main principle* of his publication to *prove*, that "the existence of these absolute contradictions is no argument against the truth of revelation in general, or the Christian religion in particular," and as *I* am certainly *not* so "completely acquainted with the subject," as to do more than copy what I find thus given as a specimen of the *geological history of things*, I can only repeat that it *seems* to speak of what is supposed to have taken place in regard to our planet, as of the movements of a *machine set a-going* and left to pursue its course "through a countless revolution of ages," without any need of providential interference or moral superintendence: for the "development of new forms of

vitality," renders, or *seems* to render, new *creations* altogether unnecessary, which some geologists fully admit to have taken place at different periods. On this account I should be disposed still to say, and maintain, that as far as God and man are concerned, the creation and introduction of our own species ought to be regarded as the *proper beginning of things*, when moral uses and moral ends manifestly appear to have been contemplated, and the Almighty evidently took the course of events into his *own hands* by the *wonderful gift of prophecy*. The learned professor above cited, speaks certainly of the *creation* of man, as distinct from the preceding "developments of vitality," and mentions, as closely connected with each other, man's "*creation and redemption*." Prophecy begins, as every reader of the Bible must know, as early as at the fifteenth verse of the third chapter of the Book of Genesis, and it seems scarcely probable that this most important prediction, a prediction in a course of fulfilment from Genesis to Revelation (and beyond), should have been mixed up with legendary tales and poetical fictions.

Appearances indeed of fiction, fable, and poetical imagery, could scarcely perhaps have been avoided, where the realities were of the nature of miracles, and future things, to be only known through *emblems*; as the hazardous acquirement of knowledge—"knowledge of good and EVIL." The conditional tenure of human life; the strict unity or rather *actual identity* of persons bound together by the matrimonial tie, "flesh of flesh, and bone of bone:" even the law on which all the responsibilities of our species appear to have been suspended, was of necessity frivolous to a certain degree, not one of the laws of the Decalogue,

as is well known, being applicable to the condition of our first parents, the history being true.

In short, I can scarcely express what I mean, in more apt terms, than I applied long ago to the case of the *Prussian Jews*, of whom I have said so much in a former part of this work; the following passage occurs in my Bampton Lecture of 1805; and consequently not directed against any living persons.

Speaking of the origin of evil, as related in Genesis, (or at the least its first appearance in our own system), I had written :—

“ God is there represented as the Author of evil, in the only sense in which it is possible he should be so; as allowing the *possibility* of evil, that man might enjoy the inestimable gift of free will. From the abuse of free will in a being of a higher order, we have intimation of an *opposing* principle, but of no *independent* one. As soon as we read of him in the Bible, we read of his dependence on the Supreme, his subjection to his irresistible power and will. As soon as we read of him as an enemy to our nature, we have intimation of God’s protection against him, and it is the same in regard to *earthly* things: as soon as we read of the introduction of evil, and the corruption of matter, and the dissolution of the body, we have intimation of a remedy; we are taught to regard them not as evils of necessary permanency, but as recoverable and temporary.

“ But this beautiful and satisfactory solution of all our doubts and difficulties concerning the origin of evil¹, being by the author of the Pentateuch neces-

¹ Milton, as is well known, upon the foundation of this very history, has not scrupled to introduce it into his *Paradise Lost*, as an explanation of one of the greatest mysteries appertaining to our condition *proceeding*

sarily delivered, *not fabulously, μυθικως*, but yet, *from the mouth of the Almighty himself*—who is represented as sitting on his throne, and beholding Satan flying towards the world, thus addressing the Son.

————— “ And now,
 Through all restraint broke loose, he wings his way
 Not far off heaven, in the precincts of light,
 Directly tow’rds the new created world,
 And MAN there plac’d, with purpose to assay
 If him by force he can destroy, or, worse,
 By some false guile pervert ;—and *shall* pervert—
 For man *will* hearken to his glowing lies,
 And easily transgress the sole command,
 Sole pledge of his obedience—so will fall
 He and his faithless progeny—whose fault ?
 Whose but his own ?—ingrate, he had of me
 All he could have ; I made him just and right,
 Sufficient to have stood, though free to fall.
 Such I created all th’ ethereal powers
 And spirits, both them who stood, and them who fail’d ;
 Freely they stood who stood, and fell who fell.
 Not free, what proof could they have giv’n sincere
 Of true allegiance, constant faith or love,
 Where only what they needs must do appear’d
 Not what they would ?—what praise could they receive ?
 What pleasure I, from such obedience paid,
 When will and reason, (reason also is choice)
 Useless and vain, of freedom both despoiled,
 Made passive both, had serv’d necessity
 Not ME ?—they therefore, as to right belong’d,
 So were created, nor can justly accuse
 Their Maker, or their making, or their fate,
 As if predestination over-ruled
 Their will, by absolute decree
 Or high fore-knowledge : they themselves decreed
 Their own revolt, not I ; if I foreknew,
 Fore-knowledge had no influence on their fault,
 Which had no less prov’d certain, unforeknown.
 So without least impulse, or shadow of fate
 Or aught by me immutably foreseen
 They trespass, authors to themselves in all
 Both what they judge, and what they choose ; for so

εν μυθου σχηματι¹, in terms and descriptions so little correspondent to present experience, as to *resemble* fable more than fact; it has been one of the concessions most peremptorily demanded of us of late, that we should consent to acknowledge it to be no better than a mythological representation of things, a description “*merely imagined* to account for known phenomena.”

There is very much more to the purpose, entirely written with a view to the representations I had received immediately from *Prussia*; not only through my old friend *De Luc*, but through other channels also. That such sentiments proceeded from false impressions there is no doubt; impressions which, I think far too well of our own geologists, to suppose they would encourage; but I am sorry their particular pursuits should lead them to put it into the heads of persons less wise than themselves, that Moses, wrote upon no better authority, than “legendary memorials,” and “poetical cosmogonies.”

I am pleased with some remarks of Dr. Priestley to be found in his notes on Genesis. “The history of Adam in paradise,” he observes, “has something in it that has the air of fable; but notwithstanding this, it is infinitely more rational than any account of the primitive state of men in any heathen writer.

“The heathens in general looked no higher for the origin of things than the earth, and the visible parts

I form'd them free; and free they must remain,
 'Till they enthral themselves; I else must change
 Their nature, and revoke the high decree
 Unchangeable, eternal, which ordain'd
 Their freedom!—they themselves ordain'd their fall.”

¹ Aristot. Metaphys.

of nature : and these were the objects of their worship. In opposition probably to them, Moses begins with asserting the existence of a Being who created all those things, and who is of course the sovereign disposer of them. The phrase *in the beginning*, must mean before they existed ; if creation means, a creation out of nothing. If it means, as it sometimes does, their *present constitution*, *in the beginning* will be before that constitution was formed, and the *present* appearances took place ; so that the earth might have existed in some other form long before.

“ According to Moses, the original state of the earth was perfectly fluid ; and such it must have been in order that by its rotation upon its axis it should acquire the form of an oblate spheroid which it now has.

“ It is probable that this account of the progress of the creation is a history of *appearances*, such as would have been given by a person who had seen the whole, but was ignorant of the *causes* of what he saw ; and the sacred writers always ascribe the operation of natural causes to the immediate agency of the Deity. But as neither Adam, nor any other man, could know what had passed before his creation, and he must have received much instruction from his Maker, it is not improbable that this general account of the five first days was communicated to him by revelation. It is evidently delivered not as from conjecture, but as from *authority*, though the manner in which the communication was made is not mentioned.”

Now I think there is a great deal of good sense in this. The history of the beginning of the human race may have something in it of the air of a fable, but is yet by far the most rational account extant, and

the reason has been given why it might be expected to bear an air of fable. The idea, that before the present actual constitution of things took place, the earth might have existed in some other form, leaves an opening for geologists to pursue their researches as far as ever they can fairly carry them, and marks a beginning for *our particular connection* with the planet in which it may be seen from the former passages in this work, I have always been disposed to agree. I have inserted the sentence concerning the original fluid state of the earth, as to be inferred from its shape, because I am persuaded that its oblate spheroidal form, will long continue to keep up the impression of a chaos, though I believe Professor Playfair endeavoured to prove long ago, that such a state of things was not strictly necessary to produce the particular form so often insisted upon. Lastly, I quite agree with Dr. Priestley in thinking that the account in Genesis, is delivered more upon *authority* than conjecture, and that it might have been communicated by express revelation. I would add to the above, that as no man, according to Dr. Priestley's remark, could know what had passed before his own creation, neither Moses nor any other man, could expect to be believed in writing of such things, unless he were sensible himself that he derived his information from a higher source.

Dr. Priestley proceeds to say, that what are called *days* in the Mosaic history, may mean any periods of time; but though this is an opinion that has been entertained by others besides Dr. Priestley, and particularly by De Luc, I have quite declined doing more than refer to the authors who have most recently discussed the point, as a topic of criticism and learned

discussion. I have insisted largely upon the Sabbath, chiefly upon the score of *feeling*, as an institution, of which I am certain the world could not be deprived, without a great sacrifice of some of the purest and noblest *sentiments* incident to our nature. I have heard of something approaching to controversy upon this subject also, but have felt no disposition, at my time of life, to enter into it¹. The only living author I have consulted, is Mr. Holden, who has written learnedly and piously upon the Christian Sabbath; a gentleman who is so kind as to send me his very valuable publications, though I have not the honour of being acquainted with him². On opening his book, now on my table, I find in the

¹ The opinion of the learned professor, whose recent publication I have had occasion to notice, is, that the Lord's Day is "simply a festival observed by the Christian Church on the first day of the week in commemoration of our Lord's resurrection on that day, and *having no reference whatever to the Mosaic Sabbath*." He therefore concludes, "that the *Christian* authority of that observance can in no way be endangered by the *rejection* of the Mosaic description of the *creation* as a literal history;" but if the *Lord's Day* of the Christians had no reference to the *creation*, the Sabbath *had*, and the *early Christians* observed *both*; the former as a memorial of the resurrection, the latter of the *creation*; as many of the Christian fathers have expressly told us [see *Grotius* on the Decalogue]. In such equal reverence were they held as to be called *brothers* and *twin-days*, *καλην την συνωριδα του σαββατου και της κυριακης*.

² Of the several authors who have at various times done me the honour of sending me their works, I cannot help mentioning at this time the Earl of Bridgewater, to whom the public is so much indebted for the very valuable treatises just published in virtue of his benefaction, and on a subject applicable, I trust, to my own views, in this trifling performance viz. "*on the power, wisdom, and goodness of God, as manifested in the creation*." Having had occasion to complain of the *apparent* substitution of *nature* for God, in the writings of modern philosophers, I may observe, that in one of Lord Bridgewater's books, I find him speak-

very last page, the following short but excellent passage : “ The sanctification of the SABBATH is indispensable to them who shall be meet for the holiness of heaven.”

I know not what course geology may take when I am dead and gone. I have lived to see many changes, and have written, as the *survivor* of many *theorists*, whose names and whose merits, have only been recalled to my recollection, by what I have judged to be misrepresentations and misconceptions of their particular sentiments and opinions ; I have dwelt longer perhaps upon the case of *De Luc* than I should have done, had I not had many manuscripts in his own handwriting to refer to, and which have never seen the light. I wished to produce him also as a witness to the fact of the apostasy of certain Jews and Christians in the kingdom of Prussia, who professed to have abandoned what I have ever considered to be a most important part of revelation, in consequence of the discovery that the *earth* did not confirm what Moses had written concerning it ; and proceeding so far upon the strength of this discovery, as greatly to lessen, in the eyes and thoughts of man, the credit of both Judaism and Christianity. What has happened may happen again ; and though I know as well as the most ardent of our present race of philosophers, that the cause of revelation may be injured by any *indiscreet* attack upon

ing of nature as the *creature* of the *Creator* ! *Servant* of God ! *instrument* of his will ! unerringly obedient to HIS command ! Sometimes man speaks, he says, of nature as “ a substitute of God.” Sometimes of God *and* nature, rather than God *by* nature, or God *through* nature ; he even notices the *ambiguity* of such expressions, as the “ *nature* of things,” the “ *order* of things,” &c. with more to the same effect, but his books being printed in English at *Paris*, exhibit a strange appearance.

science, I have long perceived that if the foundations of Christianity be not carefully looked to, they may be shaken by science before the generality of Christians are aware of it. There is nothing more certain than that revelation has received a warning to stick closely to her own concerns and not meddle with *physics*. “Mosaical mineralogy,” and “scriptural geology,” have been so proscribed, that neither piety, nor learning, can shelter the bold adventurers in such a cause from mockery and derision¹; and indeed I think myself, *such terms* had better be *avoided*. I have, therefore, not attempted to uphold the credit of Moses as a philosopher, certainly not as a mineralogist or geologist; but as an historian, and a prophet, I have the same confidence in him that ever I had.

To conclude.—If our modern, I may perhaps say, our *living* geologists, feel themselves able to place things upon a stable and lasting foundation, I am quite willing to acknowledge, that they will do more, much more than any of their predecessors have been able to accomplish, who have been successively swept off the stage, one after another in a most extraordinary manner². The greatest and most searching sweeper of this kind that I have ever met with, is Dr. Macculloch, who yet lays it down as a maxim,

¹ “Messrs. Penn, Fairholme, Higgins, *et id genus omne*.” A common *et cætera* would have been more *polite* at least.

² Cuvier was so tender of the reputation of preceding naturalists, that he used to say, “Half a century has sufficed for a complete metamorphosis in science; and it is very probable, that in a similar space of time, we also shall have become ancient to a future generation. These motives ought never to suffer us to forget the respectful gratitude we owe to those who have preceded us.”—*Memoirs by Mrs. Lee*.

that "he who must begin with sweeping, is choked by dust." I do not know whether the worthy Doctor is yet choked by the dust he has himself raised or not, but of this I am quite sure, that while his observations on the fabric of the earth seem to me to be most profound, and far exceeding my abilities fully to comprehend and appreciate, he appears to have been led to a conclusion that greatly interests me, and which for the honour of geologists, I shall feel happy to transcribe.

"And have I not shown that what is thus consistent with the conduct of the Deity, is also not inconsistent with his revealed word? If I have not, I have proved nothing; IF THERE WERE AUGHT IN GEOLOGY WHICH CONTRADICTED THAT WORD, I SHOULD BE AMONG THE FIRST TO SAY, THE SCIENCE IS IN ERROR."

I could produce passages to the same effect from the writings of other geologists, and I think therefore it ought to be known, that though they may seem to break in upon revelation, by the views in which they indulge themselves, of the *unfathomable antiquity* of the globe, they do not really mean to lessen the credit of the Holy Scriptures, though some of their expressions, and the unfortunate contempt they manifest, for the interference of a few pious and well-meaning Christians, have certainly exposed them to suspicions of such a tendency, beyond what they themselves seem to apprehend; the very acknowledgments they make of their unshaken belief of revelation, are sometimes so oddly introduced, and so nearly lost amidst the overwhelming mass of purely scientific observations, as to raise a doubt whether such acknowledgments be strictly sincere;

at all events, it seems to leave it to the unscientific friends of revelation to make out for themselves, how the two propositions can be true, that they do not believe all that Moses has told them, and yet have as much confidence as ever in the great truths of revealed religion. That we may part in good humour, I shall conclude with some of the *sweepings* of the eminent geologist just referred to; being so many obstructions at least removed out of the path of their own researches; and first of my friend De Luc.

“De Luc borrowed from Saussure,—his claims to originality therefore are but trifling, as they are not enviable; commencing with the history of the earth, before the creation of the sun, he must be allowed to settle this with a *science* of which he *probably had not heard*. I must be excused from trying to abridge what I do not understand.” I must confess, I do not myself understand the exact bearings of the censure thus passed upon my old friend and acquaintance, but to proceed:—

On modern geologists in general, to his own time, he says, “If I pay no regard to their claims to priority, it is, that the chronology of folly or error is not worth settling.”

Much in the same manner he sweeps away, with his geological besom, the whole tribe of *Wernerians*. “It is an idle office to settle the claims of ignorance:”—and of the system itself he says, “unfortunately, the less intelligible it is, the more it is explained;” and again, “to examine its loud pretences to agree with the sacred records, shall be left to those who can read a book more often talked of than read.” Lastly, “but more than enough (of the *Wernerian* system), odious

as is the task, such criticism is a needful branch of geological instruction."

Of *Kepler* and *Patrin* he writes as follows. "If I need not assign the relative merits of *Kepler* and *Patrin*, suffice it that the earth is a living animal; vital fluids circulate, minerals are produced by assimilation, the mountains are lungs, the schists are glands, secretion causes volcanoes, and even chemistry is an animal power. *Patrin* at least was a geologist. Conchologists or geologists 'haud multum distant.' I need not, however, tell the scholar that this 'vitality' of the celestial bodies has not the merit of novelty; and all can see that the sympathies of molecules are the 'understanding' of the stoics."

Burnet's eloquence seems to make him a favourite with every body, but he gets credit for more than eloquence from the pen of the learned critic.

Whiston's comet and heat-retaining *nucleus*, reminds the doctor of his strange conceit, already noticed, that the warmth of the original earth generated vice in the *terrestrial* inhabitants, while the colder *aquatic* ones escaped both crime and condemnation.

I scarcely dare write what the Doctor says of *Woodward*, considering that there is not only a Woodwardian Professor at Cambridge, but at this moment one of the most eminent perhaps that ever filled that chair, as well as one of the most conspicuous members of the modern geological school¹. Giving Woodward

¹ Since much of this work was actually printed, I have had an opportunity of reading Professor Sedgwick's Discourse on the Studies of the University of Cambridge, and have found in it a passage extremely consonant to my own ideas of *our* connection with the *earth*, on the principles of revelation. The passage is rather long, but too much to

due credit for his practical knowledge, he yet finds occasion to say, "pure ignorance is always better than falsity. The difficulties of geology have ever been produced by the Woodwards." In actual *amount* and *measurement* of critical castigation, none come off so easily as Whitehurst;

"The name of *Whitehurst* is enough."

But I must have done with these amusing sweepings, though the Doctor descends as low as to some of my own time, in addition to De Luc, Kirwan, Dolomieu, Hutton, and Playfair; modern comparative anatomy is of a later date, and of course all the theories connected therewith. I ought not, however, to take my

the purpose to be passed by. "The Bible instructs us that *man*, and other living things, have been placed but a few years upon the earth; and the *physical monuments* of the *earth bear witness to the same truth*. If the astronomer tells us of myriads of worlds not spoken of in the sacred records; the geologist in like manner proves (not by arguments from analogy, but by the incontrovertible evidence of physical phenomena) that there were former conditions of our planet, separated from each other by vast intervals of time, during which man and the other creatures of his own date, had not been called into being. *Periods* such as *these belong not therefore to the moral history of our race*; and come neither within the letter nor the spirit of revelation. Between the first creation of the earth, and that day in which it pleased God to place man upon it, *who shall dare to define the interval*? On this question Scripture is silent; but that silence destroys not the meaning of those physical monuments of his power that God has put before our eyes, giving us at the same time faculties whereby we may interpret them, and comprehend their meaning."

If I deny not that there may have been "former conditions of our planet," I have all along insisted that such *former* "periods," if such there were, do not belong to the moral history of *our race*. It is only upon a feeling that such past periods and "intervals" cannot be strictly "defined," and yet that the attempt has been made, that I have been induced to question certain of the conclusions, and calculations of *geologists*. I feel bound to refer to a work manifestly intended to relieve the latter from all undue suspicions of being hostile to religion in their pursuits of natural science.

leave of Dr. Macculloch, without observing, that his xlv. chapter, "On Theories of the Earth," from which the above extracts are taken, is replete with learning, though delivered in so close and condensed a style, as to require a good deal of attention. He is a great friend to the progress and promotion of science, and not indisposed to declaim against the "ignorance and intolerance" of what he calls "a false theology," blind to the discovery of the "new path" that had been opened to "the study of the wisdom and government" of the Deity.

I have copied this remark, (though I cannot say I entirely comprehend its force), because as the Doctor has in another place so solemnly recorded his unbounded reverence for the *word* of God, I should be very sorry to have it thought, that if geology be indeed a "new path opened to the study of *his wisdom and government*," I would attempt to throw any obstacles in its way; but as among the epochs of geology itself, we find an acknowledged *human epoch*, I have endeavoured to show, that this must be so exclusively *our epoch*¹, that as we have a most authentic

¹ I have not meddled with the extraordinary astronomical epoch of 4004 B. C. largely discussed by Dr. Nolan in his second Lecture, because I do not quite know that the *chronological* coincidence is so established as to render the epoch itself, a matter of certainty, and also because I have had occasion in an early part of this work to refer to a different computation approved by Dr. Hales. But I am not entitled through any knowledge of my own to say, that Dr. Hales was right, and Dr. Nolan and those he cites wrong. My own account of Dr. Hales's reasoning upon the subject may be seen in the Advertisement bearing my name, prefixed to the tenth edition of Tytler's *Elements of General History*, 1831. The coincidence spoken of by Dr. Nolan, is certainly very extraordinary, and strongly corroborative of the commonly received era of the creation. I pass over, for similar reasons, the learned Lecturer's remarks on the ages, &c. of the Patriarchs, Lecture V. The com-

and uncontradicted history of all relating to it, of *that*, and *that alone*, we need not regard any speculations that carry us back beyond the *human* epoch, except as purely matters of *science*, curious as leading to the discovery of very extraordinary and perhaps indisputable facts, but likely enough still to fail as to any adequate and perfect comprehension or explanation of all the circumstances connected with such facts. Much may be done, as Cuvier observed, by the “dash of a pen,” which if every circumstance were perfectly known, the facts on which they seem to rely, would by no means justify or confirm. I have always been struck with the following passage, in the first chapter of my friend Dr. Kidd’s *Geological Essay*, and I must say, though long known, it has as yet lost no particle of its original influence on my mind. I copy from an edition of 1815.

“ With respect to the question how far a theory of the earth is likely to affect our belief in Scripture, I would simply observe, that from the endless discordance in the opinions of philosophers on this point, from the manifest inadequacy of the data we are at present in possession of, and from the physical impossibilities which must for ever be a bar to more than a superficial knowledge of the earth’s structure, it is preposterous to suppose that that high degree of moral evidence on which the credibility of Scripture rests, can with any justice be weakened by our interpretation of phenomena, the connection of which among themselves even, we certainly are at present, and probably ever shall be, incapable of explaining.”

putations of Josephus, and *Theophilus of Antioch*, the first Christian chronologer, referred to in the second part of this work, leading to different conclusions.

This passage, however, I ought to add, is followed by a very judicious caution, against resting the credibility of Scripture too much on phenomena of so doubtful a character.

I hope it will have been seen that through the whole of this small work I have endeavoured to place the credibility of Scripture on a less fallacious footing; on a foundation of much greater certainty; not disdaining any support to be derived from science, or physical corroborations, but looking to the character of Moses, as a prophet, not a philosopher; and to the Book of Genesis as a book stamped with the authority of our Saviour and the chief of his apostles, at the era of the *new creation*. I have left the door open (perhaps at the risk of some blame), for the lovers and promoters of science, to pursue their researches, and indulge their curiosity, to any extent they please, beyond what I conceive to be the proper beginning of our own history, as a subject of divine revelation; distrusting indeed, though not feeling it necessary to dispute many of their conclusions and calculations, as not belonging in *their* estimation to *our* state and condition of being, and therefore, even if quite correct, unconnected with us, I will not say as objects of curiosity, but certainly as objects of faith.

I could lament, as I have before hinted, that the term *geology* had ever been applied to the *Mosaical* or *Scriptural* account of the creation, not thinking it advisable or quite discreet, (if I may say so without offence;) being likely in my own estimation to give some countenance to the mistake imputed to certain advocates of revelation, of representing it to be "*the design of Scripture to teach philosophy*;" and, "mira-

culousness being," as Mr. Sharon Turner has observed, "the true character of created nature."

A belief in the *Hexaëmeron*, as an historical record, is the result of no geological conviction, but of a strong confidence in the supernatural *power* of God, as to things past, just as much as a belief in the resurrection of the dead, is a reliance on the same *power* as to things future; in strictness, *physics* can have nothing to do with either. Though I shall never think it wrong, or out of place, to look for, and claim support from, any conformities that may be traced, as in the instance of man's comparatively recent appearance, upon the earth, now known to be a *geological* as well as a *theological* fact. St. Paul's illustration of the resurrection of the body, I conceive to be an admirable and fair appeal to *physics*, as regards the *power* of God, though the process after all will be, probably, perfectly *supernatural*.

I do not, therefore, like to read of the "*rejection* of the Mosaic record of creation," on *physical* or *geological* grounds, because, to plain and unphilosophical believers, it must appear to be a rejection or denial of the *power* of God, which I am sure was not meant by the eminent person, from whom the expression is derived.

Very few I am persuaded when they think of, or repeat the fourth commandment, entertain in their minds, the most distant allusion to any geological facts or physical processes, but I am equally persuaded that it would be difficult, under such circumstances, to *divert their minds* from a deep consideration and feeling of the *infinite power* of that Being, to whom such stupendous events, as the six days' productions, are ascribed.

We are apt, perhaps, in considering the *Hexaëmeron* of Moses, to look at our own planet too much in *detail*. We should scarcely question the *power of God* to call into existence, *in a moment*, any of the heavenly bodies above, *as they appear to our eyes*; though, for what we know, consisting of as many parts, and containing as great a variety of organised and unorganised bodies as the planet on which we dwell.

It has been shown, beyond denial, that on the continent, some time past, geology had been found to disturb the faith of both Jews and Christians; but it was shown, at the same time, and on the same authority, that in England, the faith of Christians was not so easily to be shaken. That some attempts to that effect had absolutely failed; and I earnestly hope the course of things may continue the same, since I am able, in conclusion of this little work, to bear testimony to two facts of high importance to all true believers.

First, that not only a great abundance of very learned and wise persons see reason still to adhere to the strict letter of divine revelation; but secondly, that the most eminent and respectable of those who avowedly give up the literal sense of certain important passages, and have appeared, from the course and compass of their physical researches, from the unbounded antiquity they assign to this earthly planet, and from expressions too little guarded, to give too much advantage to the infidel and unbeliever; do nevertheless, as far as my reading goes, manifest a great desire to have it understood, that whatever suspicions of a contrary tendency may have arisen in the minds of their less scientific brethren, their own faith in revelation, in the "Gospel of Christ," in "the

truth as it is in Jesus," in "the mystery of godliness," remains as strong as ever, and may not, with any justice or propriety, be questioned or disputed.

This being generally known and understood, it is to be hoped, no ill effects will ensue, from the prosecution of their geological researches. But if by any circumstances, they *should appear* to come into serious or suspicious competition, with the great truths of revelation, then I would wish to have leave to remind my readers of the very solemn declaration of Dr. Macculloch noticed in a former part of this treatise, namely, that "if geology should be found to *contradict* the revealed WORD of GOD, he," as a believer in revelation as well as a geologist, "should be among the first to say, *the science is in error.*"

APPENDIX.

Having omitted the opportunity of introducing the following remarks into the body of my work, I subjoin them as an appendix.

No. I.

I FEEL almost persuaded that modern geological discoveries have had a tendency to impress the mind of man, with new, and perhaps therefore false ideas, of the *sublime*, as regards the works of God. I find it admitted, by a gentleman very averse from believing the *literal* accounts of the creation, in the Book of Genesis, that “it is a description of the original formation of the world couched in such magnificent imagery, as the glowing fervour of the most high-wrought imagination may in vain seek to emulate.” This then surely is an ample acknowledgment of its *sublimity*—and in what consists its sublimity? surely in ascribing to the Deity, a power of commanding things into a perfect state of existence, with as little reference to secondary or physical causes as possible; but what is the view taken by the same writer, of the actual course of things? I have already copied the very words, “a long succession of periods or eras, throughout each of which the world had its perfect complement of *life* in abundant variety, continuing through different stages of indefinitely long duration, successively developing new forms of vitality to supply the place of those that had become extinct: until *at length*, in the countless revolution of ages, the face of the globe, and the species inhabiting it, began to assume something like its existing appearance, and became a suitable habitation for man.” I will take another account from no contemptible writer, certainly quite otherwise:—“The state of the globe becoming more and more consolidated, and permanently fitted for living beings of superior organization, and those tremendous convulsions depending upon the destruction of the equilibrium between the heating

and cooling agencies in action subsiding, the quietude of the earth presented a favourable *opportunity* for the creation of a higher species of mammifera than hitherto produced, and accordingly *man* was created¹."

Supposing this to be all true, I cannot discover much *sublimity* in it as regards the Deity, and any want of sublimity, must surely betoken a deficiency of adaptation or suitableness. Every body, without the assistance of Longinus, must, I think, be capable of duly appreciating the *sublimity* of that magnificent *fiat*, "let there be light, and there was light," which in the original, Longinus rather enlarges upon; introducing a pause, to give time as it were for considering, how the works of God could be most appropriately set forth. The passage is remarkable—"Ταυτη και ο των Ιουδαιων θεσμοθετης, επειδη την του θειου Δυναμιν κατα την αξιαν εχωρησε, καζεφηνεν· ευθυς εν τη εισβολη γραφας των νομων, 'Ειπεν ο Θεος,' φησι· ΤΙ; γενεσθω φως, και εγενετο· γενεσθω γη, και εγενετο." Here we find the *earth* as well as the light, included in the same instance of *sublimity*. Surely then, Longinus himself would have been startled, had he been in the way of hearing, that a much more sublime account could be given of the operations of the Deity; that instead of commanding the earth, as preparatory to the introduction of *man*, into existence at once, for his accommodation, and as quickly to bring forth all things "pleasant to the sight and good for food," that man's intended habitation so much exceeded the power of God to produce in an instant, that in reality he was obliged to wait for an opportunity, and could only proceed to the accomplishment of the object he manifestly had in view, "through different stages of indefinitely long duration," "countless revolutions of ages?" and a previous trial of various "forms of vitality;" not one of which seemed fit to be continued.

I have said, "the object he manifestly had in view," because I have lately read in Sir Charles Bell's much, and justly

¹ See the Letters on the discoveries of modern geologists in *Fraser's Magazine*. In making free with some of the geological parts of these letters, I should be sorry to be thought indifferent to the very curious and interesting information they contain on many subjects of natural history.

admired Bridgewater Treatise, on the Mechanism of the Hand, the following passages :—“ There is *extreme grandeur* in the thought of an *anticipating* and *prospective* intelligence ; in reflecting that what was *finally* accomplished in MAN, was *begun* in times *incalculably remote*, and antecedent to the great revolutions which the earth’s surface has undergone.” “ Nothing is more surprising to our measure of time, than the *slowness* with which the designs of Providence have been fulfilled. But as far as we can penetrate by the light of natural knowledge, the condition of the earth, and with it of MAN’s destinies, have hitherto been accomplished in great epochs.”

I am quite ready to confess myself to be very dull and very ignorant upon such points ; but I must say, I do not understand, to what *great epochs* Sir Charles would, in the passage above, refer “ man’s destinies,” seeing that, *geologically speaking*, man had nothing to do, with the epochs of *extinct* animals, such as the *Iguanodon* and other Saurian epochs—and the *human* epoch, would appear to be the last and the least—that is as to what is *past* ; of the future extent and duration of the *human* epoch, geologically we appear to know nothing ; except that according to the Huttonian system, while *we* are living upon our present mouldering and decaying continents, others are preparing to receive such of our posterity as may be in the way, to shift themselves from the one to the other.

In order to account for the *progressive process*, it would seem that after all, it is not to be placed to the account of the Deity, and may not, therefore, be considered as detracting any thing from the *sublimity* of his uncontrollable *omnipotence* ; it is owing entirely to the weakness of his delegated ministers, or minister ; that is to *nature*, distinct from God. “ Nature,” we are told, “ is not intelligence, nor the Deity, but a delegated power under laws of necessity. *She* is *obliged* to go on gradually ; she cannot produce animals and plants all at once, but must begin with the most simple, and out of them elaborate the most compound, adding to them successively different systems of organs, and multiplying more and more their numbers and energy. *She* is always engaged in the formation of elementary rudiments of animal and vegetable existence, which is *like* the *spontaneous generation* of the ancients—day by day she begins anew the work of the *creation*, the monads, &c. or

rough drafts, being the only living things she gives birth to directly." Now, if we knew nothing of man *theologically*, I think we could not without difficulty, be brought to care much about him *geologically*. Considering that all which nature may be supposed to have been doing for countless ages, is, to have been working her way up to such a state of things, as might bring man into the course of *her* operations, as rather a superior species of *mammiferæ*; and not to stop at man, but possibly to go farther; in time, perhaps as far as angels; I see not how this can be said to differ much from the development system of Lamarck, though the passage above is referred to Mr. Lyell, the great and powerful opponent of that system; the following conclusion being drawn from it. After stating, that the last phenomenon of the organic creation is the appearance of *man*, the author proceeds, "And in this *long* course of changes we see clearly the wisdom and foresight of the Creator, in previously fitting the earth for his creatures before each successive species is called into life; whilst in the animal kingdom we see a progressive perfectibility going on regularly, from the period of the earliest era of the globe's formation, and from which it is not unreasonable to anticipate future improvements," that is, in fact, *we* happen to have fallen in, as tolerably respectable *specimens*, of a progressive *perfectibility*—that nature is progressive, and beautifully so, in some of her operations, as in the growth of plants and animals, and the annual variation of the seasons, is most true, but when geologists reckon and even multiply by *ages*, expressly to prevent the "undervaluing of past time," and to leave room for endless revolutions, it seems to bring them under the lash of their own great Apollo, Cuvier, who censures the "belief of a nature distinct from the Creator, and less powerful than he is, and which has no evident support, but in those fancied limits which they would place to his power."

What I write, is not through any apprehension of danger from the principles of the authors of such theories (for *theories* they certainly are beyond a certain point), but that in the enunciation of what they believe to have been the course of nature, man appears to be introduced so strangely, as to be as much cut off from any communication with his Maker, and consequently left in as much ignorance, of his own destinies, as any

other of the organic beings, that may have peopled the planet, I will not say from the beginning of time, but from some beginning so remote, as to be incapable of being ascertained. The men of science must forgive me if I had rather think of man, as he is made known to us in the Book of Genesis; as not being kept waiting as it were, through innumerable ages, for such a state of things, as might afford the Maker of the universe, an "*opportunity*" of adding to the race of *mammiferæ*, but as having all terrestrial objects expressly prepared for his reception; then created in the image of God; and made so acquainted with his own destinies, as to comprehend at once, that with regard to the things around him he was placed in a situation of commanding eminence, as a *rational* and *moral* being; a free agent, but responsible to him who made him; and the choice open to him of obedience or disobedience, good or evil, life or death.

That great genius, but unhappy man, Lord Byron, we are told, once asked a friend, "If, according to some speculations, you could prove the world many thousand years older than the Mosaic chronology; or if you could get rid of Adam and Eve, the apple, and serpent, still, what is to be put up in their stead? or how is the difficulty removed? things must have had a beginning, and what matters it when or how?"

In the Book of Genesis we have a beginning, including the *when* and the *how*; the "*when*" is confirmed—the "*how*" is as much a matter of *history* as the "*when*;" and the apple and the serpent, stand proved and exemplified, by every divine law still binding upon the consciences, and written upon the hearts of the sons of Adam, and by every temptation to transgress which this wicked world supplies.

No. II.

In the foregoing treatise I have had much occasion to observe, that while, upon our *theological* system, we have to look back upon a most marked and sublime beginning of things, upon the *geological* system we can arrive at no beginning at all; that is, as to the body of the planet, for as to the appearances of *vitality*, we seem so far to discover a beginning, or begin-

nings, that all organic fossils appear above the primitive rocks. But how or when they first came into the places where we find them, though very much has been said of eras and epochs, elevations and depressions, changes of climate, successive submersions, diluvian action, transportation, &c. &c., I must confess I do not yet know that much has been conclusively settled, except indeed, that we must consent to take it upon trust, that ages past all computation, all power of figures to express, must have elapsed before man appeared upon the earth, and then that he only came because things seemed to be ready for him, and at all events in a great measure, to put up with the leavings of a parcel of ugly animals, who had been enjoying life, “through all forms of vitality,” from a sponge to a mastodon, and under certain conditions of the planet, of which it seems impossible to form any very plausible conjecture, only that as all animals *seem* to require *food*, there must have been such tables spread for them all, as their several tastes, and appetites, the particular formation of their stomachs, and powers of digestion required—not however without due precaution, in producing the herbivoræ before the carnivoræ (for fear the latter should eat up *all* the former), insects before swallows and other birds, and plants before insects.

If then, in the foregoing treatise I may have appeared, to a certain extent, more satisfied with such theories as point to some *beginning, conformable to the history of our own species*, than to the geological systems connected immediately with the organic remains found in our strata, explained and illustrated by comparative anatomists, it is not that I would attempt to dispute any of the facts that have been brought to light, much less the truly scientific talents of such explorers of the earth’s contents, but that, granting it all to be true; granting the discoveries made to be in the highest degree indicative of the *power and wisdom* of God; it conveys no very pleasing sentiments to my mind—as a moral, rational, and I hope I may add, religious being. The moment I become acquainted with the Author of the universe, I wish to find in him other attributes, than those of mere power and wisdom; I wish to find in him attributes, more applicable to the feelings, wants, and expectations of moral, rational, and religious beings. I am almost frightened to read of such a mere succession of *vital forms*,

doomed only to make their graves in our stony strata, become extinct, and be no more seen, except in the forms of mutilated carcasses and imperfect skeletons; I am almost frightened to read of *man*, as only another vital form, brought upon the stage, to suit the shiftings of the scenes. I say it almost frightens me to read of these things, and if I had not my Bible nearly by heart, I know not that I could read about them, with any comfort or satisfaction.

In the Book of Genesis, I find my God and my Creator, and the Ruler of the universe, just where I wish to find him: I read of him as of a Being of infinite power, and wisdom, and goodness, exercising and displaying all those attributes in the creation of man, and placing him upon the earth, not as a mere vital development, the almost accidental successor of a multitude of extinct animals in all the four divisions of that kingdom of nature, but as at once designed to be the lord of this lower world, and with faculties suited to that high station. Not ignorant of his Creator, but receiving from him a law, purposely to raise him to the condition of a moral and responsible being, so as by obedience to qualify himself to eat of the tree of life, and live for ever—I find him indeed choosing the unavoidable alternative of disobedience, and falling from his high estate; but I do not proceed far, before I read, not merely of the goodness, but of the *redeeming mercy* of his Creator, stretching forth his hand to save him from the bitter consequences of his own misdoings, and by prophetic intimations, giving him assurances of a Mediator and SAVIOUR to come; and from this *beginning* of his earthly existence, enabling him to look to the very end of things, and encouraging him to hope, that he may yet become worthy to enter into the very presence of his Maker, in the heaven of heavens, there to enjoy a life everlasting, with all honour and glory, in a world without end.

No. III.

It will have been seen that some geologists, the Huttonians particularly, profess to have nothing to do with the “origin of things,” and we may not therefore expect them to tell us any thing *geologically* concerning the end—indeed they do not seem

to attempt it.—This world must appear to them like a serpent with his tail in his mouth; decaying, but yet renovating so methodically, that nobody shall be in the way of discovering any fixed or certain *termination* of things; “never ending, still beginning.” Perhaps a more just picture of the Huttonian system of a succession of continents could not be found, than in the following enigma of *Lactantius*, actually entitled *Vipera* :—

“ Non possum nasci, sinon occidero matrem,
Occidi matrem; sed me manet exitus idem,
Id mea mors faciet, quod jam mea fecit origo.”

Theologists on the contrary, profess to know something about the *end* as well as the *beginning* of things; upon the authority of St. Paul particularly, in the very chapter I selected as the basis of my remarks upon man, as known to us *theologically*; his words are these :—

“ If in this life only we have hope in CHRIST, we are of all men most miserable

“ But now is Christ risen from the dead, and become the first-fruits of them that slept.

“ For since by man came death, by man came also the resurrection from the dead.

“ For as in Adam all die, even so in Christ shall all be made alive.

“ But every man in his own order: Christ the first-fruits, afterward they that are Christ’s, at his coming.

“ Then cometh the END, when he shall have delivered up the kingdom to GOD, even the FATHER; when he shall have put down all rule and all authority and power.

“ For he must reign, till he hath put all enemies under his feet.

“ The last enemy that shall be destroyed is *death*.”

Here then is no *extinction* for us; and “these things were written for our learning;” not in the way of science, but of revelation; “that *we* through patience and comfort of the *Scriptures*, might have *hope*.”

If I were asked when this *end* is really likely to *come*, I should not be so presumptuous as in any manner to attempt to say. I should only venture to observe that it *is* coming, and

nobody can hinder it; and that we had better be upon our watch, and *that* constantly; for it may happen any day of our lives, and at any division of the day—"at even, or at midnight, or at the cock-crowing, or in the morning."

As I cannot pretend to say *when* it will come, so could I not venture to say *how* it will come, had we not been expressly told, that as one world has perished by *water*, so "the heavens and the earth which are now, by the same word," (that word which ordained the destruction of a former world,) "are kept in store, reserved unto *fire* against the day of judgment, and perdition of ungodly men." And that moreover, "the day of the Lord will come as a thief in the night."

Having this intimation given us in so circumstantial a manner, and having it in our power to read the history of *volcanos*, down to the present time, in Mr. Lyell's entertaining volumes, we can scarcely be at a loss to find materials for such an *igneous* termination of earthly things as the apostle speaks of. At present volcanos may indeed be conservative, and operate as safety-valves, but we know what it is to depend upon any security so precarious, whether physical or mechanical. And who can answer, in mundane affairs, for any obstruction or interference with *such* safety-valves, to answer other purposes? that is, in short, for moral or religious ends? How very easily it might all be brought about, may appear from the following rather alarming account of things. "The present existing crust of the earth is comparatively thin, and the surface of our globe surrounds a fluid nucleus of ignited matter, from which circumstances we appear to be by no means secure from a general catastrophe by fire."

Pliny, long ago, wondered how we could live at ease on an earth so frail. "The process of *physical* revolution," says another eminent geologist, "is slow, but *certain*;" as human creatures, it is our business to be upon our guard against *changes* that are *uncertain*, and may be, *sudden*!

But I must be cautious; for I have this instant fallen upon the following passage in my readings. "If men who know nothing of physics, will pretend to interpret the Bible in matters which *imply physical action*, they will, of course, write nonsense." I may, however, I think, proceed a few steps further, and copy the very passage that follows the one I have

just introduced, as it appears to come from an adept in physical knowledge :—" It is plain, from the recent elaborate researches in geology, that this planet has undergone *successive* changes, and that *another* may ensue, which a great improvement in the nature of man, and state of the earth, may be expected to accompany. Such is the opinion of well-informed commentators on *Cuvier* ; and it is to be added, that there is nothing whatever of which permanency can be predicated, except of the Divine Being. We are ignorant of the interior of this globe, and of the laws by which its subterraneous action is regulated. Of course, we cannot fix any date, or anticipate the phenomena, which will induce the change alluded to ; as to the *thousand* years, it is plainly a mere phrase for a long period¹. We have made these remarks, to show that there is nothing unphilosophical in the matter so far as concerns the Bible, however foolish may be the interpretations of its meaning. We say, '*of the times and seasons knoweth no man.*'"

Now this is admirably written, being principally directed, I ought to add, against the too eager propensity of certain persons, living as well as dead, to *fix* the exact date for the commencement of the *Millennium*. That this planet has undergone "*successive changes*," is a *geological* decision ; affording however ground, as it would seem, for *another* change to come, consistently with the prophecy of " new heavens and a new earth," and with such improvements in the nature of man, and condition of the earth, as to render the other portion of the prediction probable, that in the *new* earth, perfect " righteousness," may dwell. As to fixing the exact date of the commencement of the *Millennium*, (if the prophecies supposed to indicate *such a period* have not been mistaken,) men might, one would think, regard it as some check to their speculations, to be reminded, that we have already passed dates that had been fixed upon, and no *Millennium* has yet even begun ; nor are there such prospects of its beginning as should be taken into the account—not merely an increase of righteousness, but the conversion of Jews and Gentiles, and such a fall of *Antichrist* as cannot be *mistaken*—it has been supposed actually to *have began*

¹ Bishop Gray in his Sermon on the *Millennium* thinks it may have been so, p. 322.

with, or in the reign of Constantine; (but this I think will be easily given up). Of other dates that are *passed*, we may mention 1530, 1716, and 1793—those to come begin with 1866, and end with 2036—which is, I believe, Sir Isaac Newton's computation. Lactantius, who had probably read as much as could be read upon the subject in those days, not omitting the Sibylline Oracles, considered it to be very generally admitted, that it would take place in about two hundred years after the time of his writing; since which, however, there have passed more than fifteen complete centuries.

That the prophecies supposed to intimate what is commonly called the *Millennium*, will be punctually fulfilled, I do not entertain the smallest doubt; but I do entertain great doubts of such prophecies having as yet been duly interpreted; of one thing, however, we may be quite certain, that by what revolution soever the change contemplated may be brought to pass, the new earth is to be one, "wherein dwelleth righteousness," and for which therefore unrighteousness must be a perfect disqualification. "Seeing then," as the apostle has been careful to add, "that all present things shall be dissolved, what manner of persons ought *we* to be in all holy conversation and godliness."

Since writing the above (for I conclude all authors continue reading, though much of their manuscripts may be actually passing through the press), I have read in the "British Magazine," for the last month, February, 1834, two original letters of Bishop Horsley, in the first of which he speaks of the Millennium, so exactly as I have written above, that I cannot refrain from copying his words. "As to the Millennium, it is one of those mysterious points, which time, the only infallible interpreter of prophecy, must explain." In another part of his letter, the Bishop asks, "But how can the *two Testaments* be two witnesses?" Having in pp. 17, 18, of this very work, called them so, I cannot omit to observe, though in great deference to so truly eminent a critic, that I must still think they *may* be called so, though I rather adopted the expression at random, without at all meaning to decide a controverted point in divinity; surely we read of two covenants, two dispensations, two creations, two Adams, types and antitypes, prophecies and their fulfilment; and other distinctions of a *like* character,

which, though indeed the Bishop was right in regarding the whole as the testimony of *one* Holy Spirit, might serve to render plausible the supposition of those commentators, who have judged the two witnesses to be the Old and New Testaments.

No. IV.

Geologists and comparative anatomists, have had so much to do with the *animal* kingdom (to speak as a natural philosopher, though without any great pretensions to be considered as such), that I hope it may not be thought impertinent to offer a few remarks upon MAN, considered merely as an *animal*.

There is not a classical school-boy possibly, in the whole compass of his Majesty's dominions, who does not know, that the very frame and fashion of man's body, has been held to distinguish him very greatly from the rest of the animal creation, and to distinguish him, not merely in regard to certain differences of conformation, but as a being of an higher order; of higher pretensions; in short, as fitted, even by his upright frame, to hold communication with his Maker, and aspire to things above. I have already cited Ovid, as having supplied us with an admirable picture of chaos, if such a condition of things ever actually existed. And in the second Fable of his *Metamorphoses*, he has spoken of the creation of *man* in a very extraordinary manner, concluding with what must be regarded as matter of fact, namely, his erect form.

After giving a very curious account of the several "forms of vitality," adapted to different regions of the universe, beginning even with the heavens, stars, and constellations, and descending to the earth, air, waters, &c., as may be seen in the following lines;

" Neu regio foret ulla suis animalibus orba,
Astra tenent cœleste solum, formæque Deorum;
Cesserunt nitidis habitandæ piscibus undæ;
Terra feras cepit, volucres agitabilis ær."

He introduces MAN, not merely as the apex of an ascending development, but as a being, wanting as it were, to the rest of the creation; the lines are certainly remarkable.

“ *Sanctius* his animal, *mentisque* capacius *altæ*,
Deerat adhuc, et quod *dominari in cætera* posset :
 Natus HOMO est.—————
 Pronaque cum spectent animalia cætera terram,
 Os homini sublime dedit, cælumque tueri
 Jussit, et erectos ad sidera tollere vultus !”

Which last lines have been so admirably and almost literally, rendered into English, by *Dryden*, that I cannot refrain from copying them.

“ Thus while the *mute creation*, downward bend
 Their sight, and to their *earthly* mother tend,
 MAN looks *aloft*, and with erected eyes,
 Beholds his own hereditary skies !”

Of which passage in the *original*, nobody has made more, than that very eloquent, though oftentimes fanciful, Father of the Church, *Lactantius*, contending that the erect frame of man is so palpable a proof of his being designed to look *upward*, and aspire to heavenly joys, that whatever tends to fix his thoughts and attention on merely terrestrial objects, is contrary to his nature as a rational being. Contrary indeed, he adds, to the very name he bears, as the *ανθρωπος* of the Greeks¹, according to the opinions and reasonings of Socrates, Plato and Philo ; his expressions, and exhortations upon this point are exceedingly good. I cannot refrain from making a few extracts.

“ Hinc utique *ανθρωπον* Græci appellarunt, quod *sursum* spectet. Ipsi ergo sibi renuntiant seque hominum *nomine* abdicant, qui *non sursum* aspiciunt sed *deorsum*. Nisi forte id ipsum, quod *recti* sumus, sine causa homini attributum putant. Spectare nos cælum Deus voluit, utique non frustra. Nam et aves, et ex mutis pene omnia cælum vident, sed *nobis* proprie datum est, cælum rigidis ac stantibus intueri ; ut religionem ibi quæramus : ut Deum, cujus sedes illa est, quem *oculis* non possumus, *animo* contemplemur, quod profecto non facit, qui æs, aut lapidem, quæ sunt *terrena*, veneratur,” which last words, alluding to the objects of heathen worship, are

¹ Παρὰ τὸ ἄνω ἄσπρειν, a sursum aspiciendo.

meant to express a sentiment which he had introduced before in the following very striking terms. “*Qui curvant cæleste animal ad veneranda terrena.*”

I may observe, that in the notes to the *variorum* edition, great credit is given to the *Greeks*, for having assigned to man, so much more proper a name, a name betokening a *heavenly* origin, than was the case with the *Hebrews*, [Adam, אדם] and the *Latins* [*Homo*] (followed by the *Italians*, *French*, *Spaniards*, &c.) both terms having evidently a greater relation to the *earth*¹; and therefore, derogating in no small degree from the character he was designed to sustain, and the prospects to which he was encouraged to aspire.

Lactantius gives a reason why *man* was created the last of all living beings. “*Sanctæ literæ docent, hominem fuisse ultimum Dei opus; et sic inductum fuisse in hunc mundum, quasi in domum jam paratam, et instructam. Illius enim causa facta sunt omnia.*” And he again refers to *Ovid*; “*Sanctius his animal, &c., Deerat adhuc,*” &c.; as though, without such an inhabitant as *man*, the visible creation would be perfectly inexplicable; and if, at this moment, man and all his works could be conceived to be withdrawn from the earth, it would exhibit a most extraordinary appearance. There are indeed at this time races of animals around us so useful, so domesticated, so interesting, that if suddenly left to themselves, the scene would be far less terrible to behold, than a world of such strange creatures, as have been lately discovered in our *strata*; but still without *man*, as it seems to me, the condition of things would be most strange; so strange indeed, that I can scarcely bring myself to believe *appearances* have been even yet rightly interpreted: though I am backward to withhold any praise strictly due to men of science; but we cannot know all things. In every page of the second book of the *Divine Institutions* of Lactantius, I find passages, so replete with good sense, and Christian humility, that I wish every body could read them. The following I shall venture to transcribe:—

“*Opera Dei videntur oculis—quomodo autem illa fecerit, ne*

¹ Scaliger seems to have entertained a strange conceit, that *Homo* was the Greek *οπου simul*, signifying that man was a sociable creature.

mente quidem videtur. Sciat igitur quam inepte faciat, qui res inenarrabiles quærit. Hoc est enim modum conditionis suæ transgredi; nec intelligere, quousque homini liceat accedere. Denique cum aperiret homini veritatem Deus, ea sola scire nos voluit, quæ interfuit hominem scire ad vitam consequendam; quæ vero ad curiosam et profanam cupiditatem pertinebant, reticuit, ut arcana essent. Quid ergo quæris, quæ nec potes scire, nec si scias, beator fias?"

I must, however, observe, that as far as geology is connected with the practical knowledge of the mineral substances of the earth, applicable to the uses, comforts, and conveniences of man, or to the advancement of national prosperity, so far from being proscribed in the above passage, I consider it to be particularly approved: it is *speculative* geology only that requires to be kept within bounds.

I cannot dismiss this number without taking some notice of the very last pages of Sir Charles Bell's Bridgewater treatise, of "Expression in the Eye," and in which he is at the pains of showing, that the relations between the mind and body, and external nature, are so fixed and constant that, "it seems merely natural that, when pious thoughts prevail, man's countenance should be turned from things earthly to the purer objects *above*. There is a link in this relation every way worthy of attention, and the eye is raised, whether the canopy over us be shrouded in darkness, or display all the splendour of noon. The muscles which move the eye-ball are powerfully affected in certain conditions of the mind: independently altogether of the will, the eyes are rolled *upwards* during mental agony, and whilst strong emotions of reverence and piety are felt. This is a natural sign stamped upon the human countenance, and is as peculiar to man, as any thing which distinguishes him from the brute. The posture of the body follows necessarily, and forms one of those many traits of expression which hold mankind in sympathy," with more to the same effect. No wonder that man has sometimes been defined to be *animal religiosum*, when the very muscles that move the eye-ball, are calculated to draw his attention to "things above," rather than to "things on the earth."

More perhaps *might* have been said of "Expression in the Eye," as "holding mankind in sympathy," for there can be

no doubt, that it is an organ as much fitted to *convey* as to receive impressions. When our "Lord turned," and merely "*looked upon Peter*," at the awful moment of his third denial, he "went out" we read, "and wept bitterly." *Luke* xxii. 61, 62. But I apprehend more familiar instances might be discovered, by those who should be disposed to look out for them.

The reference above prevents my turning to the poets, but *Lactantius*, whom I have so often cited, certainly regarded the eye as an *active* rather than a *passive* organ; as the *window* at least, through which the mind or soul not only contemplates the things around, but *makes herself known*. "*Verius et manifestius est mentem esse quæ per oculos ea quæ sunt opposita transpiciat quasi per fenestras lucente vitro obductas, et idcirco mens et voluntas ex oculis sæpe dignoscitur.*" Cicero, as is well known, speaks of the eyes as the "*animi indices*," and various other writers, ancient and modern, might be cited to the same effect.

It seems to me, and I cannot bring myself to conceal it from the public, while so much is daily to be heard about the *march of intellect*, that *fourteen* or *fifteen* centuries *back*, it had undoubtedly, with much fewer advantages, marched so far as to furnish perfectly good matter for a Bridgewater treatise, on the very subject proposed, viz. "The power, wisdom, and goodness of God, as manifested in the Creation." I am certain I should surprise any well-educated reader, if I were to copy a few passages from *two* treatises *only* of that age; I mean *Lactantius de opificio Dei*, and *Theodoretus περι Προνοιας*. I am not sure but I could claim credit for the former, as a good comparative anatomist. Cuvier himself, for instance, could not have written more sensibly, and perhaps scarcely more correctly, of the class *vertebratæ* of the animal kingdom, than *Lactantius* has done, pointing out the correspondence between the *fore feet* of quadrupeds, the *wings* of birds, &c. and dwelling largely on the *peculiar* mechanism and uses of the *human hand*; and this in detail; of the thumb, fingers, &c. even to the nails, all designed to distinguish man, as an *operative*, applicable to the superior faculties with which he is endowed; "*ubi autem Ratio, manus est;*" "*Quid dicam de manibus rationis ac sapientiæ ministris*?"

¹ The following passage ought certainly to be transcribed, as a sum-

He discusses at length, in opposition to the Epicureans, the superiority of man as compared with the inferior animals, showing how reason in the former is calculated to supply the place of all the natural advantages of the latter. “*Ita fit, ut plus homini conferat ratio, quam natura mutis,*” which is not merely said but proved; as the “*ita fit*” implies. Theodoretus is not less particular than Lactantius, in speaking of the extraordinary structure and uses of the *human hand*, and in abundance of very curious instances, brings forward such strong proofs of the providence, power, wisdom and goodness of the Creator, from the formation of the universe to the incarnation of the Son of God for the redemption of fallen man, as to be highly deserving the attention of all persons desirous of knowing how much more we owe to the diligence, attention, learning and eloquence of ancient writers than modern wisdom would seem to allow. I could almost wonder that Lord Bridgewater, who was apparently a man well acquainted with the authors of antiquity, did not at once direct the discoveries of modern science to be engrafted, as it were, on such treatises of former ages, as those to which I have alluded; for there are many more of a similar description still extant, though several have fallen a sacrifice, as might be expected, to the ravages of time.

No. V.

Having had occasion in the first section of the foregoing work, to treat rather largely of the *manhood* of Jesus Christ, as an *assumed* manhood, and by no means implying that he was no more than man, but indeed the contrary, though Dr.

mary of the views he has taken of *vertebrated* animals. “*Ex ipso autem vasculo corporis quatuor fecit extantia, bina posterius; quæ sunt in omnibus pedes; item bina capiti et collo proxima; quæ varios animalibus usus præbent. In pecudibus enim ac feris sunt pedes posterioribus similes; in homine autem manus; quæ non ad ambulandum, sed ad faciendum, operandumque sunt natæ. Est et tertium genus, in quo priora illa neque pedes neque manus sunt; sed alæ, in quibus pennæ per ordinem fixæ volandi exhibent usum: ita una fictio diversas species, et usus habet.*”

Priestley in his "Corruptions of Christianity," would have us believe, that "our Lord's *mere humanity* is the *clear* doctrine of the Scriptures, and that the apostles never taught *any other*;" I think it not amiss to observe, how remarkable a circumstance it is, that the celebrated confession of Peter, that he knew Jesus to be "the Christ, the Son of the living God," *Matt.* xvi. 16., should have originated in an inquiry on the part of our Saviour, in which he had particularly called himself, the "Son of *Man*." The whole passage is very striking. "When Jesus came into the coasts of Cesarea Philippi, he asked his disciples, saying, Whom do men say that I the Son of *MAN* am? And they said, some say, John the Baptist; some Elias; and others Jeremias, or one of the prophets," plainly showing that they looked to the *manhood* only, as the subject of general opinion; and which furnished therefore, no complete answer; for, "he saith unto them," the Scripture proceeds to tell us, "But whom say *YE* that I am?" This more home question, so to speak, immediately drew from Peter a full acknowledgment of his *divinity*. "And Simon Peter answered, and said, Thou art the *CHRIST*, the *SON* of the *LIVING GOD*. And Jesus answered, and said unto him, Blessed art thou, Simon Barjona; for flesh and blood hath not revealed it unto thee, but *MY FATHER* which is in *HEAVEN*." Peter does in no manner deny the manhood, but peremptorily asserts the Godhead; he affirms, in short, three things of Jesus; that he was the *CHRIST*; that he was the *SON* of *MAN*; and that he was the *SON* of the living God. It is to be noted that the appellation of *Son of Man*, is applied to Christ by himself, but by no other person throughout the four Gospels: it occurs seventeen times in Matthew, twenty in Mark, twenty-one in Luke, and eleven times in John, and always with this restriction. — See *Paley's Evidences*.

That our Saviour by calling himself "the Son of Man," never meant to *deny* his *heavenly Sonship* is evident from the account we have in Matthew of his betrayal by Judas. When the false disciple had given the sign he had pledged himself to give, Jesus said unto him, "Judas, betrayest thou the *Son of man* with a kiss?" But when, upon his surrendering himself up, his other disciples would have rescued him from the power of his enemies, he checked them, by *reminding* them of his higher character;

“Thinkest thou, that I cannot pray to *my Father*, and he shall presently give me more than twelve legions of *Angels?*” and again, when carried before the high priest, and adjured to tell him whether he were the Christ the Son of the blessed God, he refers them to a proof, that may be said to have included both Sonships, and to have been so understood. “And Jesus saith, nevertheless,” (that is, notwithstanding the despised and lowly form in which I now appear at this tribunal,) “hereafter shall ye see the Son of *Man* sitting at the right hand of the power of God, and coming in the clouds of heaven ;” which was considered to be so explicit and clear a declaration that he claimed to be the *proper Son of God*, that they at once pronounced it to be a *blasphemous* assumption of *divinity*, and a pretence for all that was to follow—in fact, our Lord knew, that as the Son of *Man*, he was *THAT* Son of Man, exclusively, that was revealed to the Prophet Daniel in his “night visions, as coming in the clouds of heaven, and to whom was assigned an everlasting dominion, which should not pass away ; a kingdom that should never be destroyed.” Dan. vii. 13, 14.

I can understand why the incarnation of the Son of God should appear a mystery to many minds, because in fact it has never yet been made known to us otherwise than as a mystery ; a “great mystery,” 1 Tim. iii. 16. But I *am* at a loss to conceive how it can be supposed that the two characters ascribed to our Lord in the holy Scriptures, could possibly be given to any being possessed of a simple nature¹.

No. VI.

That no wrong impressions may be left upon the minds of the readers of this small volume, I must, in conclusion, request it to be understood, and recollected with some indulgence, that it was written by an author, born some years before the Baron Cuvier², and of course many years, before his very curious

¹ See this admirably discussed in the Sermons of President Dwight, of Yale College, in Connecticut. Sermon xlii.

² It would seem as if the author had been partly kept alive by his own personal insignificance, since besides *Cuvier*, who was his *junior*,

and extraordinary researches, had produced that excitement and enthusiasm amongst naturalists, which ever since his labours became known to the world, have been at work, are now at work, and are likely to continue so, as long as ever new discoveries may be made in the mineral kingdom, particularly in such parts as shall be found to contain organic remains, whether animal or vegetable.

It should also be remembered that the author is old enough to have been in communication with naturalists of great name in their day, whose opinions upon some points were confessedly approved, and fully adopted by Cuvier himself; points of great importance in regard to the credibility of the Mosaic history. I very naturally regarded Cuvier, for instance, as a host in support of some of the principal conclusions of his predecessors *De Luc* and *Dolomieu*, particularly with respect to the low antiquity of our present continents; the sinking of former continents at the time of the deluge, and the course of things since. I also considered him to be a firm believer in the Genesis of Moses, and I am extremely happy to make out from Mrs. Lee's most interesting Memoirs of Cuvier, just published, that in all likelihood his opinions remained the same to the hour of his death. She has been careful to introduce into that work, the following passage cited in a former part of my book.—“ I think with MM. *De Luc* and *Dolomieu*, that if there be any thing positive in geology, it is, that the surface of our globe has been the victim of a great and sudden revolution, the date of which cannot be carried back further than from five to six thousand years; that this revolution has buried and caused the disappearance of countries formerly inhabited by man, and animals which are now known; and on the other hand, has exposed the bottom of the water, and has formed from that, the countries now inhabited.”

I shall now copy what is said of his belief in Moses; premising only that having in a former part of this work observed that Moses was compelled to write of, or introduce, *emblems* at the very beginning of the Book of Genesis, he soon laid them aside for plain history.

there were born, it appears, in the *same* year as Cuvier, Napoleon Buonaparte, the Duke of Wellington, Mr. Canning, M. de Chateaubriand, Sir Walter Scott, and Sir James Mackintosh.

“ The second lecture gave a sketch of the four great nations constituted at the remotest period before Christianity, and of which history gives us any certain information. The extent of their knowledge was measured; the influence of that knowledge appreciated; and in speaking of *Moses*, M. Cuvier said, that although Moses was brought up in all the learning of the Egyptians, he foresaw the inconveniences of, and laboured much to abolish their practice of veiling the truth under mysterious emblems. That Moses was in possession of that truth, was evident from his system of cosmogony, which every discovery of recent times serves but to confirm.”—[Memoirs of Cuvier.]

I am sorry to look upon the present state of things, fancying I see the approaches of something like a contest between revelation and science; which every prudent person would wish to prevent, and which in my own mind, I think, might be prevented, without any hazardous concessions.

I have observed in the course of my reading, that our most respectable geologists in the midst of their enthusiasm, (for enthusiasm there certainly is) profess to entertain an unshaken veneration for the sacred writings, provided, that is, and this proviso gives offence to some, that they be considered as exclusively the vehicle for instilling Divine truths into the minds of men, and to have nothing to do with the “ laws and structure of the material universe.” The origin of the earth and man, they say, so far from having been co-incident, as the Book of Genesis would seem to intimate, was in reality so totally distinct, as to have no assignable connection whatever. Man, they allow, appears to be of recent origin, but the earth itself of a perfectly incalculable age, though for a very great length of time, stored with vegetables and animals; the latter of orders and classes inferior to man, and some, of species entirely extinct long before man appeared.

It has struck me, that if this theory be altogether correct, *we*, as human creatures, can have nothing to do with such a state of things. Such vegetables might as well have grown, and such animals have existed in quite another world—a world therefore which we may very harmlessly give up to the cultivators of physical sciences, as they themselves seem to propose. I do not however see that we are bound to give up a letter of the

Mosaical history, which evidently, to use a term of their own, is the commencement of a new *epoch*. Taking *our* beginning from thence, we are surely at liberty to conclude it to be no history of purely physical operations, but quite different; in fact a *revelation* of the manner in which our species was introduced into this planetary orb, communicated through the instrumentality, not of a geologist, but a *prophet of God*. We are not called upon to account for it; we are not expected to receive it as a discovery of science, but an object of faith. And as to any physical difficulties, what can they have to do with a question of *creation*, which as far as regards *man* it undoubtedly is.

The main question then, between geologists, and the believers (the *full* believers) in the Genesis of Moses, appears to be this, whether the latter may be held positively and authoritatively to preclude all belief in such a *previous* state of the planet, as the newly discovered organic fossils are judged to intimate. And I must confess, I have never felt under any necessity of believing that it does do so. I have shown in a former part of this work, that as long ago as in 1805, when I preached my Bampton Lecture, and still earlier, when, in 1801, I printed my book entitled ΕΙΣ ΘΕΟΣ ΕΙΣ ΜΕΣΙΤΗΣ, I fully determined it to be my opinion, that we had nothing to do with any previous condition of this planet; nor do I recollect that this opinion was ever objected to by any author, reviewers, or private friends; all we could require to know was, when it pleased God to prepare it for our use, and put us in possession of it; and of this I have always thought we have been amply informed, and *there*, as a *believer*, or a *theologian*, I am willing to take my leave of the geologists; not so however as a *lover of science*. Let them still explore the earth as much as they please; let them discuss *facts*; let them draw their own conclusions from these facts; I shall still feel myself at liberty to think that they have in no manner as yet¹ *improved* upon the *Genesis* of *Moses*. That in

¹ I have said "as yet," because Cuvier, like Newton, has left a 'legacy of research,' and I feel persuaded, that whatever of *reality* may come to be discovered, would be found to redound to the glory of God, if *explanation* could be brought to *keep pace with discovery*.

describing the beginning of things, the latter is quite sublime in comparison with the "long periods," the "great epochs," the various "forms of vitality," which were to be passed over, tried, exhibited, and dismissed, before man *could* be brought upon the stage. I think it much more consistent with the *several* attributes of the Deity, to represent him, as Moses has done, as a God not merely of power and wisdom, displayed in the creation of insensible vegetables, and irrational creatures, to occupy the globe for ages and ages, but as a God of goodness, beneficence, and love, for the creatures of his hands; as bestowing upon some of them, at the least, not merely a set of instincts suitable to their condition upon this earth, but faculties and endowments, of a much higher nature; reason, intellect, free-will, a capacity of knowledge and perpetual improvement, with an imagination continually prompting them to aspire to higher things, and to give them a relish for the prospects of everlasting happiness, held out to them in the Book of Life. These are the considerations which have induced me sometimes to speak of modern discoveries more slightly, than as very curious objects of *science*, I should perhaps have otherwise done. For I cannot too often repeat that I am far from being an enemy to science. But knowing as I do, that the immense antiquity attributed to the earth by modern geologists, has, through a few unguarded expressions of their own, and an incapability of sufficiently explaining their new discoveries, disturbed the minds of some, offended the feelings of others, and led to publications in which revelation and science appear to be brought into collision, with no small interruption of that harmony which ought for ever to subsist between the lovers and promoters of both *learning* and *science*, I have endeavoured to bring matters to such a point, as may secure to revelation all its proper supports, without opposing any pursuits of science, or calling into question any well established facts.

THE END.

ERRATA.

Page 25, line 1, *for* expiated, *read* expected.

— 64, — 5, *for* Humphery, *read* Humphry.

— 91, — 22, *for* notice it all, *read* notice it at all.

— 173, — 14, *for* this species, *read* his species.

— 175, — 18, *for* connation, *read* connection.

— 183, note, line 4, *for* infusoria, *read* infusoriæ.

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